Vol. 30, No. 14, Bethpage, N. Y., July 26, 1971

plane GRUMMAN news

Apollo 15 astronauts ready to lift off for moon mission . . .

KENNEDY SPACE CENTER, FLA. —This morning, three astronauts were to be rocketed from a launch pad on Merritt Island to begin a 12-day-plus journey to the moon and back.

The two men in the Lunar Module, Commander David Scott and LM Pilot James Irwin, are due to land on the moon at about 6:15 p.m. (EDT) July 30 and explore our close neighbor in the sky for approximately 66.5 hours —twice as long as any previous trip— while Command Module Pilot Alfred Worden keeps circling our satellite.

Liftoff from the moon is scheduled for shortly after 1:15 p.m. August 2. LM docking with the CSM is due almost two hours later. And at about 4:45 p.m. Saturday, August 7, the trio of space adventurers is scheduled to splash down in the Pacific.

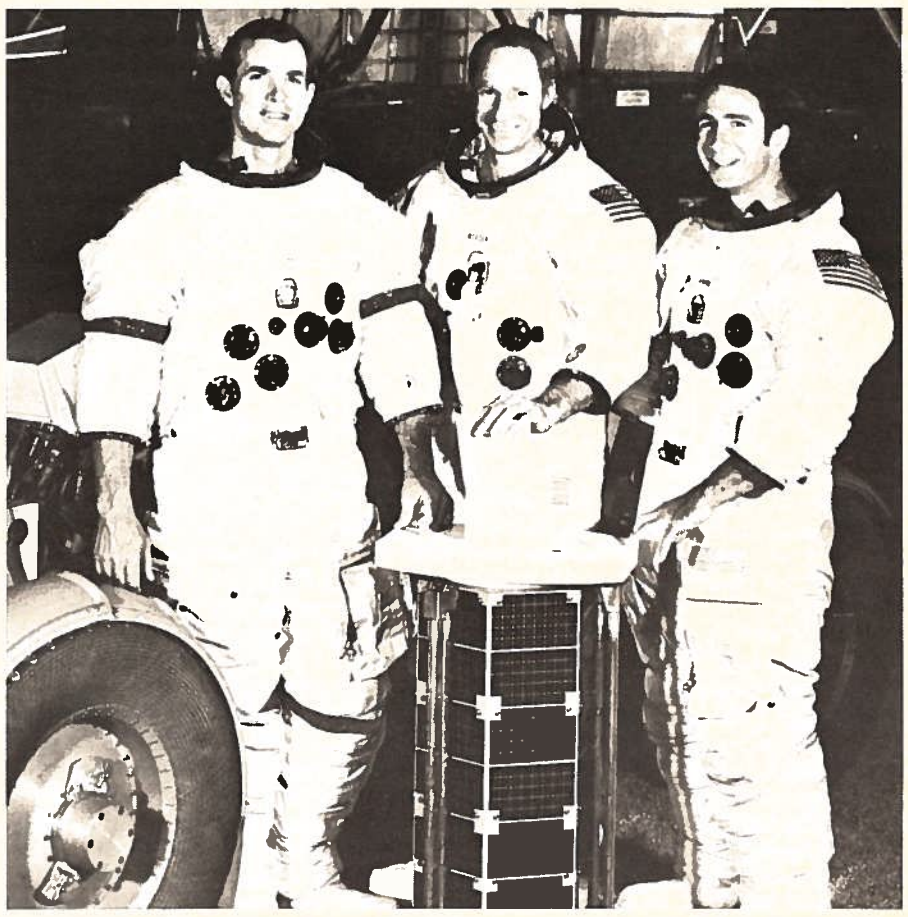
Placed in that type of compressed time frame, everything seems so simple, so matter of fact, even easy. After all, "we" have done it before; and all the signs point to a remarkable learning curve that suggests that each vehicle has been better than the one that preceded it. That's probably true.

Also true, though, is that each vehicle has a "personality" uniquely its own; no two are **exactly** alike, nor should they be, for each is to do a different job at a different place in a different way. What has been the same is what Grumman's director of Operations at Cape Kennedy calls "meticulous attention to detail." Whatever is checked is rechecked and rechecked . . . and rechecked.

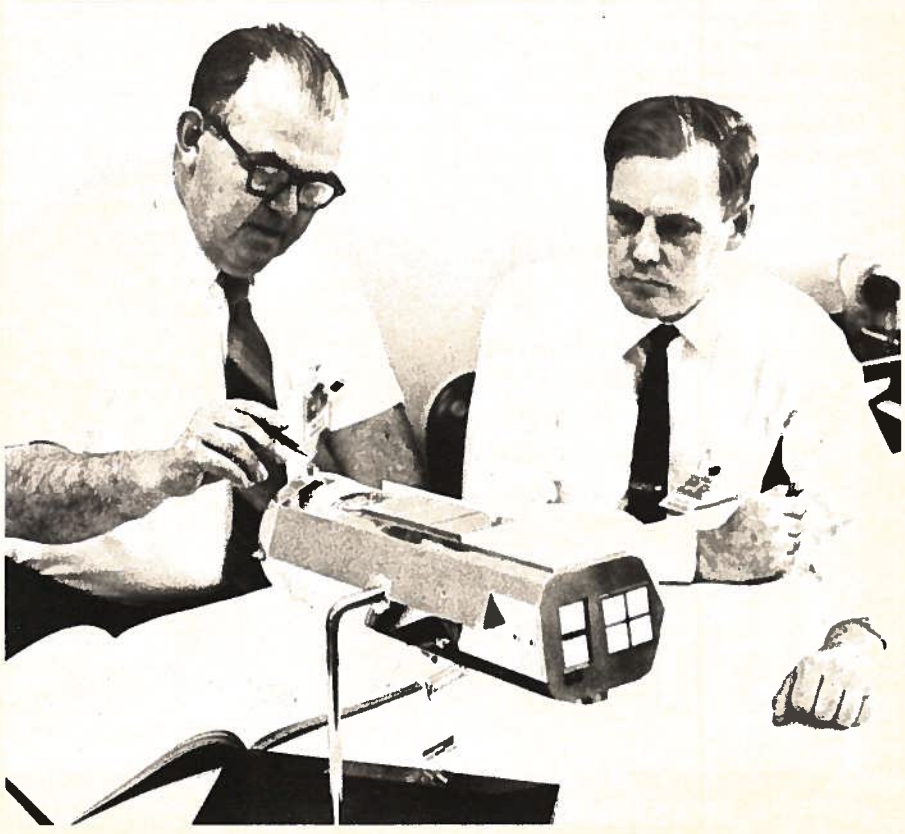
To get back to the vehicle's "personality," it's changed for LM-10, called the Falcon. And physical changes have been made, too. For example, earth weight has increased to 36,000 pounds, an additional battery has been put into the descent stage in order to extend its lunar stay, descent stage propellant tanks have been extended to accommodate 1,150 more pounds of fuel, a battery-powered four-wheeled vehicle (the Lunar Roving Vehicle, or LRV) is carried in LM, an additional water tank and an added oxygen tank have been built in, and there's a lot more. In a sense, Falcon is a new LM— and that in itself dictates a closer view, for, as Grumman Consultant Pilot George Dowling has said, "We can't let them (the astronauts) be surprised."

Protecting against bad surprises is

(Continued on page 3)



Ready for ride. **Experiments packages in front of them and the Lunar Roving Vehicle partly shown at left, astronauts (L to R) Dave Scott, Al Worden, and Jim Irwin are ready for moon trip. (NASA photo)**



Space traveler. **NASA plans to launch first High Energy Astronomy Observatory in 1975 to further explore the heavens. Here, Charlie Oliver and Ed Thomas check placement of experiments in observatory model. (Photo by Harry Pro)**

. . . as Grumman team steps up effort on new NASA contract

During the next few vacation-beckoning weeks a Grumman crew will be hard at work in Plant 25 on the High Energy Astronomy Observatory, HEAO. The Request for Proposal was issued by the National Aeronautics and Space Administration on July 6, and a response is due August 27. "We have the talent and the facilities and a strong determination to win this," said Vice President Ralph Tripp, director of HEAO.

Grumman, teamed with Bendix and Hughes, received a $250,000 contract in the spring of '71 for a Phase B study of the 10-ton observatory. The RFP, just issued, is for the multi-million-dollar C/D design and hardware phase for two spacecraft. TRW is competing against Grumman.

"We need such a space program to help sustain the very able spacecraft specialists still with us," Tripp said. "Other companies are loudly pleading poverty, but there are really no fat cats in the aerospace business, and we at Grumman have felt the pinch like everybody else. With delivery of our last LM, the number of our LM employees has dropped from a peak of 9,000 to a present count of 1,000, and Grumman employment overall has dipped from a high of 37,000 in 1968 to about 24,000."

Associated with Grumman on the RFP are Bendix (control subsystems), Hughes Aircraft (power systems), Lockheed (orbit adjust stage), and Radiation, Inc. (data subsystems).

Grumman sees its role in the HEAO program as analagous to its role in the LM program. "We are practical, we are conservative," asserted Tripp, "and hardware oriented—the kind of company that builds a dependable vehicle. With LM, the task is getting astronauts to the moon and back to earth; with HEAO, as with OAO, it's building a vehicle to accommodate the experiments and getting the data back safely.

"Funds for HEAO for the Fiscal Year '72 were granted by Congress without any question," Tripp said. "They just gave it the green light. And technically there is a good deal of interest within the astronomy commun-

(Continued on page 4)

Capt. Belter, back from Pacific, heads Navy office at Grumman

After a full year on the Pacific with Task Force 77, Capt. Robert H. Belter has moved to Long Island to become the new Naval Representative at Bethpage. He seems very glad to put his feet under "a waterproof desk and take this interesting job."

Officially, he took over on July 21. Capt. Andrew Yates, whom he succeeds as NAVPLANTREP in Plant 35, will become Commanding Officer of the Naval Air Rework Facility at Jacksonville, early next month. Captain Yates has been at Grumman three years—a longer-than-usual tour "and very rewarding," he declares. "Now my family and I are looking forward to our next duty. Like all Navy career people, we're nomads."

Captain Belter and his wife have something of the same feeling. While he was engaged the past year as the assistant chief of staff for material readiness for Vice Adm. F. A. Bardshar and subsequently Rear Adm. D. W. Cooper, Commander of Task Force 77, Mrs. Belter was living in Happy Valley, Hong Kong. They came home via Europe "so we could say that our world isn't square."

Admiral Cooper's staff aboard the USS Kitty Hawk in the Gulf of Tonkin is permanently deployed to the Western Pacific. Captain Belter's job was to assure the material readiness of the ships and planes of the Task Force, which launches around-the-clock air strikes in support of allied forces in southeast Asia. The captain has completed three Vietnam tours—the first and second with Heavy Attack Squadron Four aboard the USS Bon Homme Richard, and the third on the USS Independence.

Besides being a naval aviator (he soloed at 16 and joined the Navy right after high school, in 1946), Captain Belter earned a Master's in aeronautical engineering from the Naval Post-Graduate School in Monterey, California. From 1966 to 1968 he headed the Attack Aircraft Branch at the Naval Air Test Center at Patuxent, where he flew a variety of attack and fighter aircraft. He relieved Captain Yates as A-6 class desk officer in the Naval Air Systems Command in Washington. "I kind of have the feeling he's following me," commented Yates.

Captain Belter holds two Commendation Medals with combat V, the Air Medal with two stars, a Navy Unit Citation, and the Vietnam Service Medal.

If you see a puff of dust swinging into the Navy Quarters at Mitchel Field, it might be Grumman's new NAVPLANTREP letting out the new Ferrari he bought in Europe. He has a Porsche —and a Facel Vega, too.

Capt. Robert Belter
New Navy rep at Bethpage

Bethpage farewell. Capt. Andrew Yates said his goodbyes to members of his staff and many of his other Bethpage friends at a farewell luncheon before departing for his next duty assignment at Jacksonville, Fla. (Photo by Bob Settles)

The view from here . . .

There were plenty of proud parents during recent high school and college commencement exercises last month but it's not likely that any of them were prouder than Charlie Selock and George Thompson. Their sons, Bob Selock and Mark Thompson, were among the graduates from the Human Resources school in Albertson, which conducts a high school for handicapped people. Augie Walsky, assistant to Board Chairman Lew Evans, offered the boys his personal congratulations while representing the Company at the ceremony.

Both young men were members of the National Honor Society, were active in a number of school organizations, and received other scholastic awards as well. Bob, whose dad is a foreman in Plant 24, will continue his studies at C. W. Post, while Mark, whose father works in Plant 1, is bound for Hofstra.

Note of thanks

There are some people who don't forget. Ask Morgan O'Brien and Don Reisert, members of the Grumman Plant Protection force. Both received warm personal notes last week from Robert Finch, former Secretary of Health, Education, and Welfare and now Counsellor to President Nixon. Finch sent the missives to O'Brien and Reisert to thank them for their assistance when he came in to Bethpage a couple of weeks ago on the way to Hofstra University for a speaking engagement.

Under the trees

The Environmental Technology Seminar presents "An Outdoor Environmental Happening" on Saturday, July 31, at 10 a.m. in Bayard Cutting Arboretum in Great River and at 1 p.m. at Heckscher State Park (rain date, Aug. 1.). At the Arboretum Samuel C. Yeaton, Long Island naturalist, will conduct a guided nature tour. At the park there will be a picnic (bring your own contribution to family-style cookout), entertainment by a folk guitar group, and sports and swimming.

Inside look

At least one of the 10 most recent Grumman scholarship winners is getting an interesting and somewhat unusual view of Company operations this summer. Henry Brandt, who's bound for Cornell this fall in pursuit of an electrical engineering degree, is working in the audio-visual section of Presentations Services. Just last week Henry assisted in the making of an in-house video tape. Now, how many other 17-year-olds are assistant TV directors? Quiet on the set!

Alonzo is prolific!

He's done it again. Alonzo Gibbs, Technical Directives section chief, Plant 34C, is the author of another book, "One More Day," published by Bobbs-Merrill of Indianapolis. Some of his other novels, including "The Fields Breathe Sweet" and "The Least Likely One," were listed by The New York Times among the 100 best books for young people in the years in which they were published. He also writes poems and has published a volume of poetry for adults, "Weather-House."

Gibbs is in his 36th year with Grumman. He and his wife are residents of Bethpage.

Thanks. General Manager Al Lemlein of the Grumman Savannah facility accepts Air Force Association certificate of merit from Col. Bill Kelly of Georgia Air National Guard. Grumman earned the AFA citation for its outstanding contribution to community relations in the Savannah area.

Apollo 15 crew embarking on most difficult moon journey

(Continued from page 1)

even more urgent (if that's possible) in the case of the Falcon. In the first place, it's to land at a much steeper angle than other LMs landed: about 25 degrees instead of 16 degrees. The reason is the terrain in the Hadley-Apennine area of the moon, where Falcon has to come over a mountain almost as high as Pikes Peak, Colorado, in order to set down on a plain—and without landing in a near-by area called Hadley Rille, which is a sinuous fault some 600 or 900 feet deep (sort of a mini-Grand Canyon). In preparation for what's to come, Scott and Irwin have worked at a natural earth site, the Rio Grande Gorge near Taos, New Mexico.

Mountainous site

It might be said, in fact, that the mountains and the rille are the basic reason for selecting the landing site, for it gives the astronauts an opportunity, for the first time, to study the geologic makeup of lunar mountains, tiny craters in the plain, and rilles. It is of particular interest to scientists to evaluate rocks and surface materials from these areas, especially since many geologists believe it may be possible to know when (and how) the moon arrived on the scene: The mountains and craters could provide that clue. In addition, there's the Imbrium Basin to look at, a "hole" of some dimension that was probably caused by impact with a "foreign body" yet unknown. There's a big question implicit in that: What if the material at the edge of the crater differs from the rest of the area? Hundreds of years of speculation could, possibly, be ended—or, in a way, just as satisfying, even new guide posts to our universe could appear, enlarging the "ground" to be covered in the future.

Gathering rocks and moon materials, then, remains as the Number One task for the men of Falcon.

Riding in Rover

This time, of course, there's a very useful tool to get and package more material in a shorter time than before, for the two-seater LRV should take a lot of the strain out of geologic research. The lunar rover should travel at about 10 miles per hour on level areas, so ease and a wider sampling area are now open to the astronauts.

Very significant, too, is the extension of EVA (Extra-Vehicular Activity) time. There will be three EVAs, two of seven hours and one of six—a full 20 hours. (Previous EVA time: 9.5 hours.)

Eleven lunar surface experiments are planned for the men of Falcon: lunar dust detector, passive seismic, lunar surface magnetometer, solar wind spectrometer, heat flow, suprathermal ion detector, and cold cathode ion gauge (all part of the lunar experiment package, ALSEP), plus a lunar geology investigation, a laser ranging retro-reflector, a soil mechanics investigation, and a "look" at solar wind composition. In order of priority, for the first six, are: collect contingency samples (in case there's a need to re-join the CSM quickly), make a documented sample collection, set up ALSEP, take a drill core sample, put up the laser ranging retro-reflector, and make an investigation of lunar geology.

One of the first things that Scott will do is to stand on the ascent engine cover to see, photograph, and describe the nature of Hadley-Apennine. Then there's chow, a sleep period (supposedly of 7.5 hours), and another meal. Then the first EVA is to begin—going down the ladder to the foot pad and then to the lunar surface, setting up the TV camera on a tripod, collecting the contingency sample, getting LRV on the moon and test driving it (and later mount two cameras on the LRV)—and away they go! Well, not quite that easily . . . there are experiments to deploy . . . tools to check out . . . and a lot of communication with Houston on what they're doing.

(Continued on page 7)

That's the place. A NASA artist captures the scene at the Hadley-Apennine area of the moon, where the astronauts are to land the Falcon. Three EVA sites are marked. To the right is a part of the rille, from 600 to 900 feet deep.

Launch 'window'

As Plane News went to press, all reports indicated a fine liftoff to come. This time around, the launch window today is a trifle narrow—9:34 a.m. to 12:11 p.m. However, there's another window tomorrow (9:37 a.m. to 12:14 p.m.) should a postponement be necessary. The next window occurs August 24.

Astronauts have extensive flight experience

If flight experience can be a door-opener in the space world then the Apollo 15 astronauts are laden with the right keys.

The trio, all of them Air Force men, have piled up a total of 13,673 flight hours. Of that, 11,864 hours have been on jets. Col. David Scott, commander of the Apollo 15 team, has logged in 4,278 flight hours, **plus** 251 hours and 42 minutes in space, first on Gemini 8 and then on Apollo 9.

LM Pilot Lt. Col. Jim Irwin leads the three with 6,355 flight hours; Maj. Alfred Worden in the Command/Service Module has flown 3,040 hours. So there's no dearth of flight capability.

Scott, a graduate of the U.S. Military Academy at West Point (as is Worden), is an Associate Fellow of the American Institute of Aeronautics and Astronautics. He has the degrees of Master of Science in Aeronautics and Astronautics, and Engineer in Aeronautics and Astronautics from the Massachusetts Institute of Technology.

In March of 1966, he and command pilot Neil Armstrong flew the Gemini 8 mission, which, for the first time in space history, made a successful docking of two space vehicles. As Command Module pilot on Apollo 9, he, along with astronauts Jim McDivitt and Russell Schweickart, accomplished the first **simulated** lunar-orbit rendezvous. He was the backup spacecraft commander on Apollo 12.

He has been awarded the NASA Distinguished Service Medal, the NASA Exceptional Service Medal, the Air Force Distinguished Service Medal, the Air Force Command Pilot Astronaut Wings, and the Air Force Distinguished Flying Cross.

Naval Academy grad

LM Pilot Irwin has won two Air Force Commendation Medals and received the Outstanding Unit Citation as a member of the 475th Training Wing. He was on the support crew for Apollo 10 and served as backup Lunar Module pilot for the Apollo 13 flight.

Irwin received his Bachelor of Science degree in Naval Sciences from the U.S. Naval Academy and earned Master of Science degrees in Aeronautical Engineering and Instrumentation Engineering from the University of Michigan.

Test pilot

Major Worden is a West Point graduate, and he later received Master's degrees identical with those that Irwin earned—and at the same university. He is also a graduate of the Empire Test Pilots School in Farnborough, England. He was a member of the astronaut support crew for the Apollo 9 flight and was backup Command Module pilot on the Apollo 12 flight.

Key events for Apollo 15

Event	EDT	Date	Total hours
Launch	9:34 a.m.	July 26	00:00
Earth Orbit Insertion	9:46 a.m.	July 26	00:12
Trans Lunar Injection	12:24 p.m.	July 26	2:50
Lunar Orbit Insertion	4:04 p.m.	July 29	78:31
Descent Orbit Insertion	8:14 p.m.	July 29	82:40
S/C Separation	1:48 p.m.	July 30	100:14
Lunar Landing	6:15 p.m.	July 30	104:42
Stand-up EVA	7:34 p.m.	July 30	106:10
EVA 1	9:24 a.m.	July 31	119:50
EVA 2	6:44 a.m.	Aug. 1	141:10
EVA 3	3:24 a.m.	Aug. 2	161:50
Lunar Liftoff	1:12 a.m.	Aug. 2	171:38
S/C Docking	3:04 p.m.	Aug. 2	173:30
Trans Earth Injection	5:18 p.m.	Aug. 4	223:44
Trans Earth EVA	11:34 a.m.	Aug. 5	242:00
Splashdown	4:46 p.m.	Aug. 7	295:12

Navy review team at Bethpage seeking potential cost savings

Starting today, July 26, members of a Navy team will be arriving at Bethpage to acquaint themselves with the Company and the various Navy programs being conducted at Grumman Aerospace Corporation. Eventually, the team headed by Capt. Tom Rhees and his deputy, Cdr. George Kalafut, will number about 40 people and they will review all Navy programs at Grumman in these general areas:

- Production, Engineering, Quality Control
- Purchasing, Costing, Accounting
- Plant and Facilities
- Management Control and Organization

Their objective is to accumulate and evaluate data during a four-month review to determine, wherever possible, potential areas where changes to Grumman or Navy procedures or methods of operation could lead to cost economies.

The Navy "review" team has been compared to the Industrial Management Assistance Survey (IMAS) team that was at Grumman several years ago in that it too has a wide variety of talent on its staff and that it provides an outside or "different" perspective when reviewing Company operations. The Navy review team, however, will be concerned with the specifics—the day-to-day operations—as they apply to costs, as well as reviewing general management procedures as the IMAS team did.

Mutual benefits

And, according to Pete Oram, deputy for Vice President Ross Mickey on the program, "It is an important review, one that can be beneficial to both the Navy and Grumman." To assure that the Navy team is given full cooperation, each department has assigned its own representative who will be responsible for the initial briefing of the Navy team, and who will also be responsible for the planning, execution, and control of the review in his particular area.

Oram said that Grumman personnel participating in the Navy review in any way should provide the team with sufficient information for them to conduct a complete, impartial review of Company operations under Navy contract. But he also emphasized that some guidelines have been established to assure an orderly, objective accumulation of program data.

Navy team, headed by Capt. Tom Rhees, will wear special badges during four-month stay at Grumman. Review team, scheduled to start arriving today, July 26, will try to find areas of potential cost savings.

"We want to make sure that the Navy gets information relevant to Navy programs, but we also have to make sure that the review doesn't impinge on our ability to meet our contractual commitments," said Oram. "Interviews, for example, must first be scheduled through the Grumman team director's office, and there will be a Grumman representative present at all of these interviews.

"Reports and documents pertinent to the interview can be discussed and perused at that time, but **only** the Grumman team director's office will provide copies of any documents requested by the Navy team. This, too, is to assure that there is a consistent, orderly, and objective accumulation of data. Quite often, extraneous information—personal opinions, observations about somebody else's area, irrelevant and incomplete documents — tends to obfuscate rather than clarify a situation."

Oram emphasized that the objectives of the review cannot be achieved unless the Navy team receives full, open, and professional assistance. So, he suggested anyone being interviewed should consider:

- Do I understand the question?
- Do I know the answer?
- Is my answer clear to the interviewer?
- Does my answer represent what Grumman does or what I think it ought to do—in other words, **am I stating fact or opinion?**
- Is there another, better way to provide the information requested?
- Have I answered the question asked and not volunteered extraneous information?

In closing, Oram stated: "We can be proud of our accomplishments at Grumman, and I'm sure that the way we conduct ourselves during this review will transmit this feeling of pride to the Navy team."

plane GRUMMAN news

Published twice a month for the employees of Grumman Aerospace Corporation, Bethpage, N. Y. 11714, as a function of the Public Affairs Dept., Vice President J. B. Rettaliata, director.

Editor
Brian Masterson

Associate Editors
Claire Imrie
Al Wehren

Ads, Distribution
Dorothy Zeeb

Official Photographers
Presentations Services

Telephone
Plane News: 3293
Plane News from outside line: LR 5-3293

Loans for students

With September looming large in the future for some young people bound for college, the Bethpage Aircraft Federal Credit Union issued a reminder that there are student loans available under the Federal Insured Student Loan Program.

Up to a maximum of $1,500 per academic year may be borrowed by the student for purposes of higher education or business, trade, technical, and vocational schooling. The 7% annual rate of interest is paid by the Federal Government while the student is in school and during authorized periods of deferment, provided that the **adjusted annual income** of the student and his parents is less than $15,000. Repayment by the student of the loan principal and interest begins between 9-12 months after the student completes his course of study or leaves school. If the said adjusted annual income is more than $15,000, it is still possible to secure such a loan and pay **only** the interest while the student is at school.

Applications for these loans together with detailed information about the Federal Insured Student Loan Program are available at the Credit Union Office adjacent to Plant 2. Completed applications will be reviewed by the Credit Union Loan Committee and the Federal Loan Program Committee, which has full discretion to approve or disapprove each application.

Space team steps up effort in bid for new NASA contract

(Continued from page 1)

ity, since the first two HEAOs will carry 13 different experiments."

Noted physicists Dr. Robert Hofstadter, Nobel laureate of Stanford University, and Dr. Carl Fichtel of Goddard Space Flight Center have teamed with a group of research scientists from Grumman in one of the experiments on the HEAO-B—a concentrated effort to learn more about the origin of gamma rays, a high energy form of electromagnetic radiation. Heading the Grumman group are Tony Favale of Research and Dr. Robert Madey, Advanced Space Systems, who have been working on this super high energy physics experiment since 1967. Dr. Michael Sommer of the famed Max Planck Institute in Munich is a co-investigator.

Another experiment, to put a superconducting magnet aboard the same HEAO-B to measure electron and positron components of cosmic rays, is being planned by Dr. Luis Alvarez, Nobel laureate of the University of California at Berkeley. Associated with him are Dr. Richard Kurz of NASA's Manned Spacecraft Center at Houston, together with the same team from Grumman. Favale is co-investigator on both experiments and Madey is engineering manager on both.

Launch in mid-'70s

HEAO-A and HEAO-B are scheduled for launch in mid-'75 and mid-'76, and the contract to begin building them is scheduled to be awarded by next January. They will be the first in a series, the rest being designed to operate in conjunction with the Space Shuttle (Spaceplane).

If Grumman gets the C/D contract, the HEAO offices and engineering and production facilities will be concentrated in Plant 5. "We propose to organize HEAO as a 'company within a company,' very much as we have done before with the Ag-Cat, HS Denison hydrofoil ship, and in fact the Orbiting Astronomical Observatory," Tripp explained. "We will have the advantages of a small group working together without a lot of superfluous paperwork. And yet we'll have the benefits of the facilities and capabilities of a large company.

"By adding 26 feet to the top of the Thermal Vacuum System built for OAO in Plant 5, Grumman will be able to accommodate all (except acoustic) testing phases of the observatory, including integrating the experiments it will carry. In that way the whole observatory can be completely checked out before we ship it to KSC for launch," Tripp pointed out.

HEAO personnel, besides those who have been named previously at Grumman, include Erick Stern, now deputy program manager, and Curt Deinard, appointed assistant business program manager. Leo Junen has been appointed to be resident in charge of the Grumman office at Huntsville, Ala., and Lou Pritchett is his assistant there.

At Huntsville, Dr. Fred Speer is the new program manager for NASA, replacing Rodney Stewart. Grumman has been working more than a year with Hans Fichtner and his staff. Fichtner is in charge of technical aspects of the program.

So with so much on the line in the NASA competition, it is easy to see why the next few weeks will be anything but a vacation for the HEAO team.

Nite at Shea

Starting next Monday, August 2, the Athletic Association will put on sale several blocks of reserved mezzanine seats, Sections 13, 15, 17, for the Mets-Dodgers game on Friday, August 27. The tab is $2.75 per seat, and should you want to go to Shea round-trip by bus from Plant 28, that will cost $1.50.

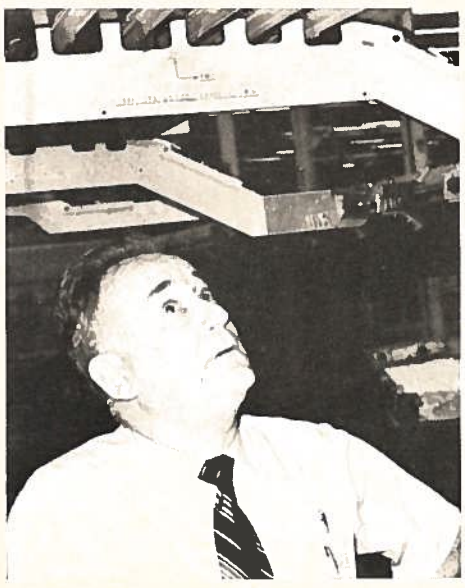
Call—or better—run to the GAA office in Plant 28B. But wait for next Monday to get on your mark.

Fleet Willie Davis and Maury Wills, and slugging Richie Allen make the Dodgers formidable opponents for the Mets—unless the N. Y. team can get their own offense going again.

Name Ripp manager at Plant 3

Plant 3 has a new manager: Augie Ripp, who has been assistant to Dan Culleton, director of production, for the past two years, has been named to the new post. He will continue to report to Culleton. His extension is 3000, in Plant 3.

Bob Prais, Ext. 3003, is the new assistant manager of Plant 3. He comes to the job with a background of Space Management on LM.



Augie Ripp

"I'm back to my old love, aircraft production, where I can actually see the construction and get involved," said Ripp last week. He had been in Plant 2 for two years, trouble-shooting and tracking schedules and such, but before that, for 32 (yes, 32) years, he had worked continuously in Plant 1.

Ripp, whose Permanent Number is 299, had a solid grounding in aircraft mechanics in the 1930s. He worked in Experimental under the incomparable Julie Holpit and then on the G-21 and G-44 amphibians with Lou Willing. "I worked on every type of plane that was built in Plant 1," he says. In his 34 years with the Company he has seen it grow from about 300 people to more than 36,000 at peak employment.

A resident of Babylon "with my gorgeous wife, Rita," Ripp has stayed fairly busy educating a family of six. Bob, the oldest, works for Grumman, in Engineering Administration. He has three children. Ken works in Inventory Control and has one child. Daughter Carol is a registered nurse at Good Samaritan Hospital and she has two. Richard and Joe are in college. Thomas is the youngest, and he's in high school.

Vreeland notches himself a title

"World Championship Waterfowl Carving Competition/1971/Salisbury, Md./Professional Class." Gold letters on a red ribbon—a proof of excellence in international competition.

Harry Vreeland of the ASW Laboratory, Plant 14, a 30-year man, was a winner in the big Eastern Flyway competition in the "Decorative Miniatures" classification of waterfowl carving competition. His entry was a pair of pintail ducks, showing them as they are rising, in almost pure vertical takeoff, their primary (flight) feathers turned for rapid flight. A piece of driftwood forms the setting. To a collector, Vreeland says, the piece would be worth about $600.

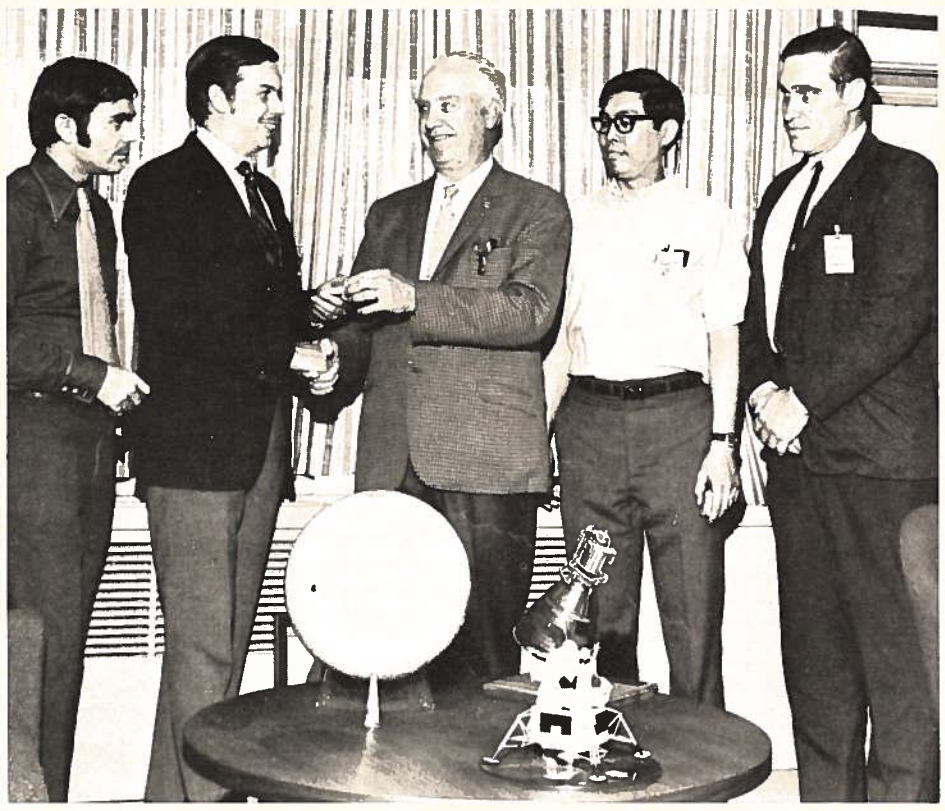
Vreeland and his wife, residents of Centerport, have collaborated on many wildlife carvings, selling some of them but keeping a lot. "Wall-to-wall birds in the living room," says Vreeland. Often his wife does the delicate painting in of the feathers, although for his red ribbon entry at Salisbury he himself did all the work—"about 100 hours."

Four-inch birds

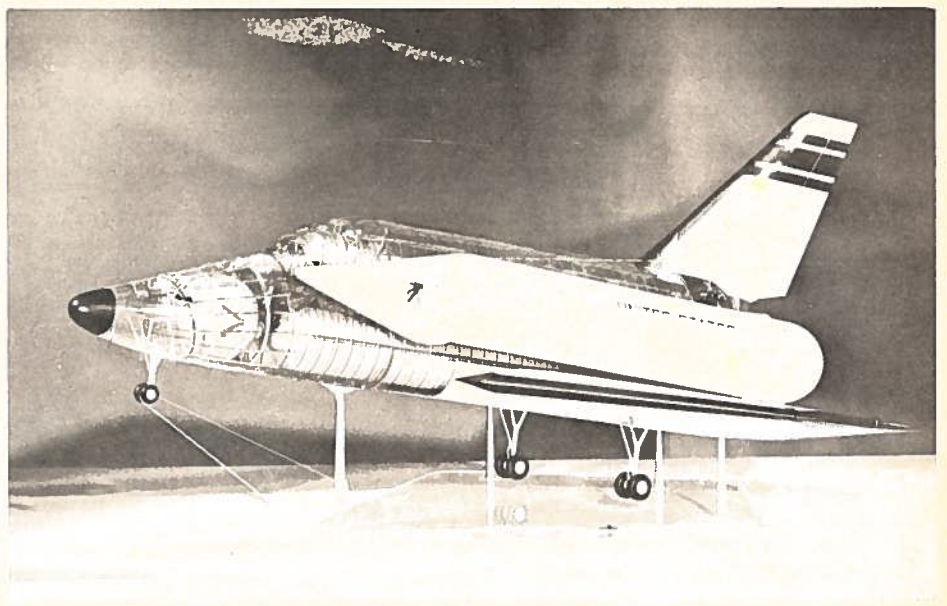
The tiny birds, each not more than four inches over-all, are authentic in every small detail. Asked how he goes about his carving, Vreeland pointed out that his other hobbies, photography and painting, help in setting the scene and the background. "I'm kind of a camera bug, and I like to paint wildlife, game birds." When it comes to the carving, "I start with a block of pine, or maybe basswood; sketch in the layout on the wood; use a small band saw. And then I'm ready to 'release' the design that's inside. I have all kinds of tools but what I use most is an Exacto knife with a Number 24 blade."

The pintails in his winning entry are painted with acrylics for authentic color reproduction.

He and his wife find a bond of interest with the other competitors in such an event as the recent carving show held in Salisbury, on the Eastern Shore of Maryland. The area is devoted to wildlife, and the Ward Foundation, founded by decoy craftsmen Steven and Lem Ward, has sponsored the art of decoy carving.



Invited. For their outstanding work on LM, Grumman's director of LM Program, Vice President Ralph Tripp, gives warm send-off to (L to R) Bob O'Neill of S/CAT, Plant 25; Walter Belt, Propulsion Engineering, Plant 25: Jim Eng, Fluid Test, Manufacturing, Plant 2; Ray Seibert, QC Inspection, Plant 5. They are guests of Grumman this weekend at KSC to see the Apollo 15 launch. (Photo by Bob Settles)



Spaceplane model. Visitors to MSC are oh-ing over plexiglass model of Space Shuttle orbiter, built by Grumman to 1/30 scale. It's 5½ feet long, and its external fuel tanks are removable. (Photo by Bruce Montgomery)

Scale model of Shuttle orbiter highlights MSC space exhibit

A scene-stealer at the Manned Spacecraft Center in Houston is Grumman's new 5½-foot transparent model of the Space Shuttle Orbiter, the reusable manned spacecraft designed by Grumman with droppable tanks. The jewel-like 1/30 scale model is on display during the Apollo 15 mission and is sure to be a conversation piece for those covering activities at MSC.

The Model Design section of Aero Test Engineering and Emil Prochaska's Model Shop in Plant 5 collaborated to produce the plexiglass model in eight weeks—in time for Grumman's final report orals at MSC July 8. Engineering drawings were photographed onto Eastman Kodak plexiglass sheets to make the bulkheads, and for the fuselage, the plexiglass was heated and formed on contoured wooden blocks. This new technique substantially reduced the cost.

The external fuel tanks are made of rolled aluminum sheet, and fuel lines are color coded: red for liquid hydrogen and for JP4, green for oxygen. The parts of the orbiter that will be built of titanium are amber colored.

'Working' model

The nose section comes off and the internal oxygen tanks can be removed—a real feature of the real orbiter—for ease of maintenance between missions. The cargo doors on top swing open, the air-breathing engines in the rear fuselage retract. The thre main rocket engines gimbal and extend and retract, and the external hydrogen fuel tanks can be removed.

Horizontal lines seen in the photo of the model are longerons, and the lines at right angles are the edges of the main bulkheads.

Up there in the cabin, dwarfed by the comparative size of the spaceplane, are four astronauts, also made to 1/30 scale: one in the pilot's seat, one at the console, one donning a space suit, and one at the docking control station in the dome. "We gave two of them mustaches," says Mike Hlinko.

Hlinko, of the Model Design section of Aero Test Engineering, and Paul Bach in the Model Shop, shared the main responsibility for getting the model planned and produced on schedule. Many others share the satisfaction of seeing this evidence of their ingenuity and handiwork. The model has already been of use as an engineering tool, a visual aid in that it provides a picture at a glance of the interrelation of many components. Following the Apollo mission, the model will be shown at other centers and included in space-related Grumman exhibits around the country.

T. Duff
Prototype

G. W. Gosline
Controls

C. W. Breem
O.O.P. Spares

E. A. Ellison
Mfg. Cost Pro.

J. H. Pullinger
T/M Engg. A/C

R. W. Eberhardt
Templates

A. A. Petrone
Final Assem.

N. A. Koutsis
Wing Sub

Salute 17 marking 25 years on July service roster

Joe Armstrong, with Permanent Number 33, leads off this month, celebrating 40 years with the Company on the last day of July. He is Plant 4 manager.

Two men are marking 35 years: James Lang, Plant Management & Staff, Plant 2; William J. Kane, supervisor, Production Control - Parts Control, Plant 2.

And 33 whose adjusted starting dates fell in July of '41 complete three decades of Grumman service:

PLANT 1: Walter W. Colburn, Fuselage Joining; Godfrey E. Mattson, M P & P Manufacturing Cost Proposals; John A. Otero, Flight Controls.

PLANT 2: William E. Voigt, Hydraulics; John D. Matthews, Production Project Managers; Albert Scaglione, Plant Management & Staff; Philip Melara and Brian D. Evans, project managers, Special Projects; Arvid S. Mattson, Tool Fab - Templates; Robert W. Hansen, Tool Fab - Metal Form Tool; Michael J. Tinger, Facilities Maintenance; William T. Crooke, supervisor, Inspection - Tooling.

PLANT 3: Joseph Dragna, Wing Final Assembly; John P. Conway, Repair Control.

PLANT 5: John M. Cornell, Instrument Aircraft Test; Martin M. Nicholson, foreman, Instrument Aircraft Test; Lowell J. Baxter, Electronic Fabrication; Frank Farkas, Support Equipment Production.

PLANT 6: Robert B. Munro, Sub System Test.

PLANT 7: Anthony Di Stefano, Flight Development/Operations; David Weinstein, Support Equipment Production.

PLANT 11: Frank J. Nemeth, Tool Fabrication - Cut Tool/Eng.

PLANT 12: Garrett Spickerman, Maintenance Industrial Control.

PLANT 16: William Demoden, Tool Fabrication - Templates.

PLANT 20: Clarence P. Gibson Jr., Transportation - Equip. Maintenance.

PLANT 25: Arthur J. Gross, Engineering Administrators.

PLANT 30: Benjamin F. French, Inventory Control.

PLANT 33: Edward E. Walch, GSE Mechanical.

PLANT 35: William C. Singer, QC Supplier.

PLANT 50: Ralph Clark, asst. department director, Business Development, Washington, D.C.

PLANT 55: James H. Tynes, Finance; William H. Walters, Technical, Savannah, Ga.

PLANT 57: Donald F. Brent, P/S Aircraft Site Management, MCAS, Cherry Point.

•

For 17 men July is Silver Anniversary month, when they join the Grumman Quarter Century club:

PLANT 2: Thurber Duff, Prototype; George W. Gosline, Controls; Charles W. Breem, Out of Production Spares; Edward A. Ellison, M P & P Manufacturing Cost Proposal; John H. Pullinger, T/M Method Engineering - Aircraft; Robert W. Eberhardt, Tool Fabrication - Templates.

PLANT 3: Angelo A. Petrone, Final Assembly; Nick A. Koutsis, Wing Sub-Assembly.

PLANT 7: Edward J. Braja, Flight Development/Operations.

PLANT 12: John P. Combs, Metallurgy & Welding Engineering.

PLANT 27: Anthony De Louise, Fuselage Joining.

PLANT 30: William A. Bellmer, Requirements Planning.

PLANT 31: John E. Flynn, Static Test.

PLANT 33: Kenneth A. Markwalter, GSE Mechanical.

PLANT 34: Franklin T. Perley, Program Management EA-6B.

PLANT 35: Robert J. Fitzpatrick, director of Quality Control.

PLANT 79: Anthony L. Messina, P/S Aircraft Systems Service.

•

When the 20-year call is sounded for July, two women and 95 men stand up:

PLANT 1: Anthony Adamo, Instrument Aircraft Test; George Ludwig, Jr., and Stanley Musinski Jr., Elect. Fabrication; Raymond E. Silhan, T/M Engineering - Methods New Programs; Fanffall Bollero, Producibility; Eunice P. Clayton, Facilities Maintenance; Milton R. Howel, Armament & Pyrotechnic Systems; Edward J. Purtill, Reliability/Maintain. Data Systems; Andrew M. Schneider, Space Systems Test.

PLANT 2: William C. Pierce, and Gustave A. Isaksson Jr, and William E. De Masters, Press; Richard Mosco, Parts Paint; Ronald Lenhart, GSE Mechanical; Gunther A. Schiel, Tanks & Ducts; Joseph Gattulli, Center Section Final; Joseph R. Schnitzer, Hydraulics; Joseph Kobylak Jr., Propulsion Test; Michael Delbuono and Ernest G. Rasmussen, Machine Shop; George R. Crawford, Out-of-Production Spares; Kenneth J. Schakenback, Production Manufacturing Budgets - Program; John R. Dombkowski, Tool Fabrication - Jigs & Fixtures; William L. McKinnon and Rudy A. Ossenfort, Tool Fabrication - Machine Shops; Henry J. Behrens, Tool Fabrication - Die Shop; Walter E. Haacke, Tool Fabrication - Status & Jig Bore; Henry G. Wacker, T/M Engineering - Tool Design A/C; Charles I. Habacker, Inspection - Mechanical; Paul Hitzigrath, Inspection - Tooling.

PLANT 3: Edward G. Grabowski, Machine Shop; Maurice Cavallaro, Spotweld; David J. Malone and Thomas L. Brierton, Chem Mill; Albert W. Pilnacek, Wing Final Assembly; John A. Grimaldi, Fuselage Assembly; Edmund A. Kaiser and James G. Schmidt, Profile Machine/Hydraulics; Walter Szatkowski, T/M Engineering - Tool Design - LIA Subcontract; John A. Scheidel and Charles R. Richardson, Facilities Maintenance.

PLANT 4: George D. Reuther Jr., Electronics Test; Charles Huebner, Final Assembly - Structure; Raymond J. Froehlich, Facilities Maintenance.

PLANT 5: John Schmidt Jr., Flight Avionics; Charles J. Abrams Jr., Production Control - Records & Release; Charles P. Keane, Presentation Services; Frank J. Horsch Jr., Structural Test; Joseph Donato, Inspection - Aerospace Assembly.

PLANT 6; Robert H. Marshall, Instrument Aircraft Test; John Jansen, Ordnance; Hans G. Biegler, Final Paint; Arthur Herrschaft, Calverton Planning & Control; William J. Douglas, Timekeeping; Willard A. Jessup, Inspection - Mechanical.

PLANT 11: Louis P. Corneau Jr., Tool Fabrication - Plastic Tooling.

PLANT 14: Robert J. Groesbeck, Facilities Maintenance.

PLANT 15: Walter M. Petersen, P/S Customer Orders & Rec.; John S. Zukowski, P/S Technical Writing.

PLANT 17: Lawrence J. White, Stanley J. Kadluboski, Anthony M. Russo, Salvatore J. Buffalino, Everett M. Green, and Roy R. Gilmore, Shipping & Spares Consolidation.

PLANT 20: Harry J. Chapman, Transportation Office.

PLANT 24: Albert H. Bechhoff and Frederick H. Bowden, Central Receiving; Henry A. Frank, Receiving Inspection - Machine Parts.

PLANT 25: John G. Foley, Subcontract Management - Space.

PLANT 27: Walter Hoehne Jr., Wire Prep.; Ralph Milito, Sub-Assembly; Daniel E. Masler, Product Manufacturing - Budget - Cont. & Status; Michael Cartabuke, T/M Engineering Method Spec. Det. Compos.

PLANT 30: Ralph J. Nicholes, Critical Material Control; Onofrio T. Gallo, General Purchasing; George DeOstiguy, P/S Comp. System; Henry T. Dishington, Equipment Engineering; Frank G. Rini, Accounting Staff.

PLANT 31: Daniel V. Cusick, Environmental Control.

PLANT 33: James Lanzone, GSE Mechanical; Charles H. Mahady, Elect. Fabrication; Laurence Egan, Flight Avionics.

(Continued on page 8)

E. J. Braja
Flt. Devt./Ops.

J. P. Combs
Met. Engg.

A. De Louise
Fuse. Join.

W. A. Bellmer
Require. Plan.

J. E. Flynn
Static Test

K. Markwalter
GSE Mech.

F. T. Perley
Prog. Mgt.

R. Fitzpatrick
QC Admin.

On location. **Flight deck of attack carrier Independence is a busy place—and noisy. Filming launch of A-6 Intruder are Bill Joyce and Ken White of Aerolog. (Photo by Larry Van Wallendael)**

See Med as 'Sea of Contention' with growing Soviet naval threat

Grumman has completed a sound-and-color film, "Sea of Contention," about the Soviet threat in the Mediterranean, and is now making it available to civic groups and service organizations for showing. Apply to the Grumman Film Library, Aerolog Facility, 1211 Stewart Ave., Bethpage.

"The Navy interested us in making the film," said Dick Milligan, manager of Presentations Services, "and it was produced by Grumman and Aerolog Productions. It's a 16mm film running 28 minutes, with original music, and narration by the actor Alexander Scourby.

"The Navy wanted to show U.S. Sixth Fleet action, and especially attack carrier action, in the Mediterranean, where the Soviet fleet has become a constant threat with its vast buildup of ships and planes. A recent Time Magazine article describes the situation this way:

"For a long time the Mediterranean was an American lake . . . Since 1964, the U[illegible]. has increasingly had to share its 'mare nostrum' with a constantly growing Russian fleet. Today the two forces are very nearly equal . . . With both superpowers patrolling the Mediterranean in force, the grim game of surveillance is played in dead earnest." The film is designed to promote an awareness of this confrontation and the peace-keeping role that the attack carrier plays with the Sixth Fleet.

"The photography was done by the Grumman-Aerolog production crew aboard the USS Independence and in Sicily, Sardinia, Malta, Naples, and Athens, and during carrier operations at sea. Larry Van Wallendael was responsible for the air-to-air photography, and Nick De Jesu, Grumman Service representative in Naples, helped coordinate our visit in that area," Milligan said.

"Sea of Contention," completed in March, has been approved by the Department of Defense and cleared by the Navy. Call Ext. 86919 to reserve the film, but allow at least a week before your scheduled show date.

OBITUARIES

Plane News has received word that death has come to the Grumman personnel listed below. We extend sincere sympathy to relatives and friends.

MICHAEL GRAZIANO of Inspection - Aerospace Assembly, Plant 5, died July 6. He was 57 years old and had been with Grumman since 1955. He lived at 734 Pine Ave., West Islip.

JULIAN WINTER of Avionics Management, Plant 5, died July 9 at the age of 52. He had been with Grumman since 1949 and lived at 23 Walter Court, Commack.

BERNARD BECHHOF of Product Support Technical Writing, Plant 34, died July 18. He was 43 years old and had been with Grumman since 1967. His home was at 69-32 199th St., Fresh Meadows.

Courten arouses wide interest with search for 'new' planet

Hank Courten's spare time activities are on a scale far beyond the scope of most mortals' imagination. He's looking for a planet in an orbit tucked between Mercury and the sun.

What he started out to do, in 1966, was to photograph unmapped stars and comets, and to do this he had to take photos during solar eclipses. Courten thinks big, so he took his vacation and went to Brazil. He and his party shot the eclipse there in 1966, and when they had accounted for all the known stars in the neighborhood of the sun, they still had some objects on their film that they couldn't identify.

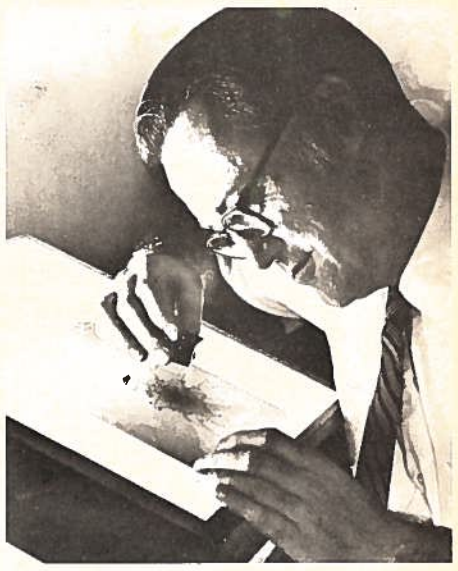
These objects, they reasoned, might be comet fragments—or they might be something else. Further observations in Siberia and Mexico during the solar eclipses of 1968 and 1970 added new data. Courten and his party began to think in terms of a planet. Mihran Miranian of the U.S. Naval Observatory, comparing his analysis with observations made by Sheldon Smith of the Ames Research Laboratory, now leans toward the planet theory. One skeptic, Dr. Brian Marsden of the Smithsonian Astrophysical Observatory, thinks Courten has nothing astronomically important.

Teaches astronomy

Courten is an optical systems engineer in Product Support, Plant 4, and a teacher of astronomy at Dowling College evenings. He'll become world famous if further observations corroborate his theory that there is indeed a planet between Mercury and the sun.

"I am 100 percent convinced that we have something out there in space," he says. "If it isn't a planet it could be a mixture of planetary objects or comet fragments." However, he is certain enough of the significance of his discovery to have presented a paper at the 14th Plenary Meeting of the International Committee on Space Research in Seattle June 19. "I opened up the possibility to a lot of people there, and I've had most welcome response from astronomers and amateurs, offering to help in examining the evidence," he says.

Courten has had his eye on the sky since 1958, when he and some astronomy associates set up a tracking station on the roof of Plant 5 for tracking satellites at night. "At first we couldn't even trace them on our plates," Courten recalls. But with improvement in technology and a lot of experience, they were able to produce spectacular results and fulfill a contract with NASA—the first NASA contract Grumman ever had. Today, of course, their equipment is highly sophisticated, incorporating a special scanner and computer and extremely sensitive film.



Hank Courten
Eye on the sky

'Aim to find it'

Closely associated with Courten over the years have been Don Brown and Harold Dunayer of T/M Engineering Optics & Metrology. They expect to be involved with him in the next solar eclipses, one that will extend across northern Canada from Alaska to the Maritime Provinces in 1972, and the other in Africa in 1973.

"If there's a planet there, or what would be equally exciting, some chunks of debris that the sun is sweeping up as it moves in its orbit, we aim to find it," says Courten.

On vacation . . .

Hey, gang. We're not going to publish the next regularly scheduled issue of Plane News because of staff vacations. We know you're going to be sorely disappointed, but try to survive until we see you again. And keep those letters and cards coming (sorry about that, Dino). We'll have someone on duty at the Plane News office in Plant 5 to receive inquiries and possible story leads.

And hold up those ads! Send no more until August 9. The next issue of Plane News will be distributed at Long Island facilities on Friday, August 27—and to other locations as quickly as the U.S. postal service can carry them.

Have a happy vacation yourselves.

More on Apollo . . .

(Continued from page 3)

(As a matter of fact, communication with Houston occurs regularly and necessarily throughout the entire space odyssey. The Houston-Spacecraft link comes as close to a face-to-face conversation "with the next door neighbor" as possible. Also tuned in, ready to run support tests and trouble-shoot problems, are the crews at KSC and Bethpage—and beyond, if necessary. Remember the problem-solving done on Apollo 13 and Aquarius, where just about all the expertise available to the program chipped in to make the flight a success? The back-up troops are there!)

Much of the action will be seen on TV, and there's a special viewing bonus planned after the third EVA: the LRV will be parked facing the LM, but at some distance, to take photos of the liftoff from the moon!

Board Chairman Lew Evans seems to be making a point during chat with coordinators while (below) President Bill Zarkowsky and Vice President Tom Rozzi say 'hello.' (Photos by Bob Settles)

Get-together for coordinators

About 80 plant coordinators for the Opportunity Development Department got their chance recently to query top corporate officials on the 'state of the business' and just about anything else that they were concerned about during a get-together at the Holiday Manor in Bethpage. Lew Evans said he enjoyed the event so much he suggested meeting every month or so. At last report, that meeting schedule was determined to be too frequent and every three-to-six months would be more appropriate.

The approximately 80 coordinators in Long Island plants assist Opportunity Development by listening to problems or concerns of their co-workers that can't be worked out at the supervisory level, and then directing them to appropriate areas in Personnel, etc.

Present with ODD co-director Jean Esquerre and Bill Voorhest were Board Chairman Lew Evans, President Bill Zarkowsky, and Vice Presidents Tom Rozzi and Jack Rettaliata. After a short briefing on Company business, Evans and Zarkowsky opened the door to a free exchange in question-and-answer period. What went on? Ask your coordinator!

Anniversary roster . . .

(Continued from page 6)

PLANT 34: Rudolph Pollini Jr., Product Manufacturing Program Managers; Mildred R. Mack, P/S Secretarial Services; Jerome T. Minerva, Technical Directives; William J. Muller, P/S Technical Writing.

PLANT 35: Fred E. Renkewitz, Loads & Criteria; Douglas E. Fredericks, Armament Cont. & Auxil. Systems; Alexander J. Wallace, Engineering Administration Staff; Nicholas P. De Marino, QC Technical Services; Ronald A. Reiss, Program Management Out-of-Production.

PLANT 36: Edwin T. Stubbs, Upholstery; Joseph C. Maraglio Jr., Plant Management & Staff.

PLANT 77: Frank H. Greene, Facilities; William G. Kenney Jr., Facilities Services.

PLANT 83: John A. Madeiros, KSC Quality Control.

•

Four women and 53 men earn 15-year anniversary pins this month:

PLANT 1: Patsy P. Giannetta Jr., Sub-Assembly - Major.

PLANT 2: Robert A. Click, GSE Mechanical; Hugh C. Grandison Jr., Propulsion Test; Paul M. Pedersen, M P & P Advanced Management Plans; Clyde N. Stover Jr., Engineering - Management; Thomas L. Agiesta, Product Manufacturing Program Managers; Fortunata A. Pasquarella, T/M Engineering Tool Design; Peter C. Fales, Presentation Services; Joseph Scelza, Timekeeping.

PLANT 3: William L. Stewart, Machine Shop; William H. Dunekack and Edward J. Mattis, Honeycomb Core Details; Paul S. Lembo, Plant Management and Staff.

PLANT 4: Robert J. Collins, Final Assembly - Structure.

PLANT 5: Michael Bordonaro, Flight Avionics; Robert M. Rubin, Support Equipment Production; Thomas R. Haller, Production Control/Parts Control; Richard Grigat, Structural Test; Andrew Pfortsch, Structural Test Engineering; Raymond Sala, Environmental Test; Robert E. Dowd and Bruno A. Maiolo, OPS Analysis & Planning Research; John W. Kellett Jr., Advanced Aircraft Systems; Eleanore J. Laudenback, Business Development; Donald J. Sheehan, DOD Aircraft Program Staff; Frederick W. Hawkins, Community Relations.

PLANT 6: Francis A. Doddato, Calverton Planning & Control; Norman L. Garms, Reproduction Services.

PLANT 7: Gerard R. Kern, Flight Avionics; Michael A. Chartuk, GDS - ATS; Jack H. Stephenson, FAD Management & Staff; Edwin J. Cartoski, Flight Evaluation.

PLANT 12: George H. Tweed, Facilities Maintenance.

PLANT 25: Odd E. Sangesland, Thermophysics.

PLANT 27: Nicholas J. Wyatt, Fiberglass; William B. Lamm and August A. Krastel Jr., Sub-Assembly - Major; Leonard Trifaro Jr., Major Assembly; Thomas R. Hughes, Production Control/Parts Control.

PLANT 28: Barbara H. Fox, Insurance & Records & Benefits.

PLANT 30: James Karika Jr., Manufacturing Schedules & Status; Robert R. Ruotolo, and Thomas Rabbitt, Requirements Planning; Harry J. Newman, Product Support Provisioning Requirements; Bernadette Shea, Materials Accounting.

PLANT 32: Frederick B. Delamain, Inspection - Mechanical.

PLANT 33: Frank B. Rom, Electronics Repair.

PLANT 34: Raymond E. Henderson, Contracts Aircraft.

PLANT 36: Alexandro Conte, Fuselage Major Assembly; Walter Ciskowski, Industrial Engineering - Aircraft.

PLANT 38: Joseph LaRocca, Training & Development.

PLANT 41: Raymond P. LeCann, GDS - ATS.

PLANT 52: Lawrence Langan and Arthur H. Hamblin, MSC Manufacturing Shops, Houston.

PLANT 55: John E. Cavuoto, Quality Control, Savannah.

PLANT 83: Robert W. Hubbard, KSC Manufacturing Shops.

PLANT 94: Arthur C. Duffield, Field Base Administration, Va.

•

Two who reached 15th anniversaries in May and June respectively were inadvertently omitted from previous anniversary rosters (they're on a different computer run): Anita Horn, secretary to Dr. Tom Cheatham, President of Grumman International, Plant 41; Henry Hinz, Grumman International Accountant, Plant 41.

Jets sock Shadows 11-0 to win GAA summer softball festival

"When you're hot, you're hot" is the way the song goes, and for the streaking Jets that rock aphorism held true during the recent summer invitation softball tournament sponsored by the Grumman Athletic Association. Unfortunately for the Shadows, defending champs of the tourney, the kicker—"and when you're not, you're not"—also held true.

So it was then that the Jets, temporarily sidetracked in their race to the team title when Research edged them 3-2 in the semi-finals of the winners' bracket, came back with five straight triumphs, the last two over the Shadows, to cop the tournament crown.

On the way back, the Jets took on the Whiffles in the losers' bracket, knocking them out of the box and out of the tournament with a 5-1 win as Mike Fiola, Brian Scheu, Chuck Hess, Marty Martinez, and Cleveland Jones combined to punch out an easy win.

Within an hour the Jets were laying it on Al Wallace and the Rangers, knocking Wallace into right field (where he ended up the game) on the strength of 22 hits, good enough for a 13-5 victory. Martinez and Jones were the hit men who did the most damage, Marty collecting a single, double, and homer, and Cleveland hammering out two singles and a round tripper.

That set up another meeting the next day with Research, victim of the Shadows' 3-0 whitewash in the finals of the winners' bracket. This time the Jets took no chances, landing on Research for six runs in the first, a salvo highlighted by Chuck Hess's two-run blast. Jerry Rainford lost his shutout in the sixth when Research scored their lone tally in the 7-1 rout.

Riding high

And along came the Shadows, riding a three-game victory skein in the tourney, defenders in the summer tournament, and one of the outstanding teams in last year's slow-pitch competition.

The first encounter between the Jets and Shadows couldn't have been much closer, as the two teams traded the lead for seven innings, then wound up 6-6 at the end of regulation play. In the eighth, the Shadows went ahead 7-6, and, with a man on second, another single chased Mel Washington toward home as Tom Ramberg in center rifled his throw to catcher Tom O'Connor. There was a tremendous CRASH!, but Tom held on to the ball to cut off the Shadows' rally.

In the last half of the eighth, the Jets got their wheels in motion, collecting three singles to score the tying run. A walk loaded up the bases, and then Scheu hit a towering fly to center to send home Mickey Rowles with the clincher in an 8-7 upset.

Up, up, and away. **Picture of supreme confidence, Jets pose for Plane News photographer Bob Settles after laying it on the Shadows, 11-0, to win the GAA summer softball tourney. Winners were: (kneeling, L to R) Jerry Rainford, Art Hudson, Bingo Korothy, Mike Feola, Chuck Hess, Dom Pagnozzi, Ralph Classen; (standing, L to R) Brian Scheu, Ted Wess, Tom O'Connor, Tom Ramberg, manager Marty Martinez, C. J. Jones, Mickey Rowles, Bill Masone, and Bob Diemer.**

But wait! The Shadows weren't out of it yet. They had one more chance in the two-defeats-and-out tournament, one more opportunity to save face **and** the team crown.

Errors hurt

Almost before you could say "The Shadows are dead," they were dead. And by their own hands. The first two runs scored on errors, then hurler Jerry Rainford smashed a two-run homer, making it 1-0 Jets. Before it was over, the Jets caught everything in sight, and combined with some stellar slugging—there was another homer, this one by Bill Masone—they ran away with the "crucial" finale, 11-0. Yes, that's a zero, one of the most difficult accomplishments for a pitcher in slow-pitch play. Outstanding hurling by Rainford — he allowed only 20 runs in eight games—earned for him the Outstanding Ballplayer award in the series.

Leading the Jets' hit parade were: Cleveland Jones, .520; Chuck Hess, .500; Brian Scheu, .481; Ted Wess, .555; John Korothy, .444; Mickey Rowles, .444; and Bill Masone, .440.

For Marty Martinez and the members of the Jets, it was the sweet smell of success. Oh how sweet!

Boot practice

You can kick if you want to. A lot of guys do — and there's a need for more. That is, if your kicking is soccer.

Joe Campisi wants the Grumman athletic world to know that good booters are needed. The first practice session will be held right after working hours at the Plant 3 field on South Oyster Bay Road on July 25 and every Wednesday thereafter, weather permitting.

The soccer season runs from September right through to May. Hopefully, Grumman will field two teams in the Long Island Soccer League, which is made up of 27 teams from 19 clubs. So you big booters: There's room, 11 people per team on the field and a maximum of seven substitutes.

Exhibition games are played Saturday afternoons. Call Campisi on Ext. 1134 for further information.

Pinehurst date

If you've been unfortunate enough to have missed the first two Mixed Pinehurst tourneys sponsored by GAA this season, there's still time to sign up for the third **and final** one of the year. That's on Wednesday, August 18. But sign up now with Mike Cherry of GAA, Plant 28B, Ext. 2133 or 2269.

The fee is $4 each—$8 a team—which includes greens fee and contributions to the kickers prizes.

In a Mixed Pinehurst, each partner tees off, and on the second shot, hits the other's drive. Then they select the one with the better lie, playing that one alternately until holed out. Pick your own handicap so that your net score will be within 30-40 and you qualify for kickers' prizes. Remember, August 18. Call Mike. Now.

Cisco, Holsten pace tee win in L.I. circuit

Tony Cisco and Bob Holsten played par golf through 12 holes in a recent match with Photocircuits to pace the Grumman squad to a 7½-½ victory in the L.I. Industrial Circuit last week. Ironically, it was Cisco and Holsten who gave up the one-half point, earned by Photocircuits for playing the first six holes even in the contest.

Holsten, who slipped below par on three occasions, added three birdies—at the 470-yard fourth, 513-yard seventh, and 480-yard 12th—to make up for the lapses. Cisco was more steady, giving up one to par at the 341-yard second, but getting back on track with a birdie at the fourth.

Steve Gray, playing in No. 3 spot, fiinished at 2-over par, with a birdie-3 on the 383-yard 12th, while Caesar Roscigno signed in with 53 for the 12-hole match. The win put the Grumman team on top of the Industrial circuit with an unblemished record of five wins.

Loop leaders

Al Ghoreyeb and Bernie Zukowski lead at the half-way mark in Program Management loop play at Hauppauge Country Club. Zukowski, A Flight leader, and Ghoreyeb, who leads in Flight B, both finished with 40 for nine holes.

In Bearcat competition, Dick Moulton's 41 for nine holes on the Yellow course at Bethpage topped the league, while 43s by Tom Schindler and Randy Soper and a 44 by Ernie Neves were among the other highlights. At the halfwaymark, the Bearcat team standings list Neves and Bill Swinson in first, Houlton and Schindler, second, and Walt Wenchel and Bill Treadwell, third. Individual point leaders are Frank Galluccio, Swinson, and Schindler and Al Zarod.

Ernie Bjorkman, who dropped an eagle-2 on the 255-yard second hole at Dix Hills, shot 40 for nine holes to pace Business Office league results. Mike Myers dropped a birdie-2 on the 105-yard fourth, and Bill Mullin earned a birdie-3 on the 280-yard seventh, while scoring 42 and 48, respectively. Joe Sherry, 44, and Bob Lind and John Kempey, 48, were among the leaders.

And, at McKay Field, more action

After a seesaw battle of hits, runs, and unscheduled fielding gems, Joe Frisino's Manufacturing Proposals team came up with better numbers than Contracts during a recent confrontation on the softball diamond of Grumman's fully-equipped in-house facility — McKay Field. A firm estimate of the runs tallied after seven innings of frantic action on the basepaths established a 7-6 win for Jim McDonagh's aggressive aggregation. Vince Morgan, winning pitcher for Proposals, was ably supported by the big bats of Fred Assey, Kevin Ryan, Jack Jacquin, Hank Buthmann, Vinny Lebas, Dennis Fecci, Skip Conlon, Gene Lastorino, and Larry Conboy.

Although Joe Ryan's Contracts cohorts brought along an enthusiastic cheering section of wives and children, the Proposals team's fielding showed marked evidence of a learning curve in the final innings, and the one-run delta was sufficient to make for a decisive win. Contracts came back strongly in the bocce and horseshoe pitching event, but a sextet of hardnosed Proposals players led by Dan Seip won two-out-of-three hotly contested volleyball brouhahas.

Car Pool

VETS HWY.: Via Expressway (Levitt Dev.) to Plt. 14 or 15, 8:12-4:42. 234-0893.

BKLYN.: Belt Pky. to Plt. 30, 8:30-5 p.m. 212 CL 6-0413.

CROSS IS. PKY.: Via Francis Lewis Blvd. to Plt. 15. 212 357-3812.

QUEENS VILL.: Glen Oakes area to Plt. 25, 8:12-4:42 p.m. 479-0508.

Ride Wanted

ARVERNE: To Plt. 3, 7:30-4 p.m. 212 474-7773.

LONG BCH.: From station. GE 2-3311.

Wanted

APT.: Hicksville, Hempstead vic., 2 rm., unfurn., elder. woman, Aug./Sept. occup. SU 5-6653.

HDTP.: For '59 Korvette. 472-0432.

LADDER: 32 ft. alum. ext. FR 8-2537.

TRANSMISSION: For '6 M.G.B. LI 1-4483.

HORSE TRLR.: Used, for 2 horses, tandem axle, bks., part. & chest bar, reason. gd. cond. 751-2292.

DRUM SET: For beginner. 868-9039, after 5.

APT.: Sma. unfurn., in Syosset, Jericho, or Hicksv. area for bus. woman. OV 1-5927, after 6.

LAWNMOWER: Rotary rider, gd. cond., reason. GR 5-6129, after 6.

MOD. AIRPLANES: Old plastic kits. PE 1-5752.

MISC.: Goldfish access., will take off your hands. 549-4171, bet. 4:30-5:30.

For Rent

TENT TRLR.: Camp., slps. 4, Universal auto. hitch avail., $7/day, $15/wkend. CA 1-3625.

APT.: Bethpage, 2 rm., pvt. ent., lease req., gent. pref., $150. 931-1384.

APT.: Bethpage, 6 rm., ground fl., ½ mi. town & plts., 1 mo. security, $285/mo. WE 5-0885, after 6.

APT.: 3 bdrm., pvt. front & rear ent., sep. bsmt., Huntington area. 271-5014.

TENT CAMP.: Slps. 6, sink, icebox, etc., $25/lg. wkend, $50/wkdays. 724-4766, after 4:30.

BUNGALOW: Ferndale bet. Grossinger's & Swan Lake, slps. 4, colony, pvt. lake, swim, fish, boat., thru Labor Day. PY 6-3887, after 5.

ROOM: Bethpage, furn., pvt. bath & ent. WE 5-3871, after 3.

HOUSE: Catskill Mts., furn., 3 bdrm., $90/wk. 427-5364.

APT.: Patchogue, 1½ rm., furn., all util. incl., pvt. ent., w-w, avail. 9/1. GR 5-6129, after 6.

HOUSE: N. Patchogue, 3 bdrm., lrg. panel. rec. rm. w/firepl., fin. bsmt., blt. in vac., ref/freezer, pool part. furn., prins. only, refs., lease, $300/mo. LT 9-1587, after 6.

ROOM: Massapequa, 1½ furn. rm., sep. ent., wlk. to shops, female pref. PY 8-3869.

ROOM: 2 mi. Grumman plts., pvt. ent. & bath. PY 6-4210.

HOUSE: Hampton Bays, furn., 3 bdrm., gar., dinette, bsmt., o.h.w.h., Sept. thru June. ED 4-3015.

HOUSE: Man share, thru Oct., Hampton Bays nr. bridge, beaches. 226-5256 after 8 p.m.

Free

KITTENS: 5, 1 calico. JU 1-4408.

KITTENS: Various colors. 732-7265.

For Adoption

CAT: Calico mix, spayed, fem., 1½ yr. 475-4672.

For Sale

SURFBDS.: 2, 9 ft. 6 in., $50. 541-9266.

SURFBD.: 9 ft. 6 in., $40. MO 9-2892.

PUPPIES: Germ. shep., AKC, lrg. boned, reason. 378-5612.

PUPPIES: Germ. shep., AKC, champ sired, show stock, raised w/child., health, hips & temp. guar., $150; 7 mo. fem. avail., terms. 473-8980.

POODLES: Std., AKC, shots, silver, male & fem., $80-$100. 731-6264.

PUPPIES: Boxer, flashy fawn, AKC, champ sired, gd. dispos. OV 1-7381.

PUPPIES: Fox terrier, 3 male, 1 fem., $40. JU 1-4408.

GOLF SHOES: Corfam material, sz. 9D, $15. 427-2054.

For Sale

MOTORCYCLE: '69 Harley-Davidson XLH sportster M-C. 7,000 mi., 950cc, $1,875. 212 931-5990.

CARRIER: For motorcycle, carry up to 300 lb. cycle on car bumper, never used, $20. LI 1-8590.

BDRM. SET: Queen sz. bd., dress. & chest, $175. 212 372-5173.

STEREO: KLH, mod. 26, hd. phones incl., $190. SU 1-6305.

STEREO: Solid state, Monacore AM/FM radio w/JVC NIVICO turntbl., 2, 10½ x 7½ x5½ spkrs., ear-phone hook-up, aux. sp. hook-up, ask. $130. RO 4-1304, after 4.

WASHER: Kenmore mod. 70, 18 lb. cap., nds. timer, $55. 757-5755, after 6.

POOL: 20 ft., 4 ft. high, $50. CH 9-4145.

For Sale

MISC.: Elect. Eng. bks., ref. data for radio eng., $12; MIT radiation lab series; Terman's, others, $60; auto. changer; parts; mahog, sew. mach., cons., fully auto., $85; Lester mahog. piano, spinet, $450; pr. crystal candelabras, $75; Underwood elec. typewriter (ofc.) $45. 271-7367.

CORVAIR: '61 Monza, 2-dr. sed., 4-spd., R&H, bkt. seats, 6 whls. & tires, nds. some work, ask. $100. 427-8146.

STA. WAG.: '63 Rambler, 6 cyl., td., nds. work, $50. 473-2797.

BARRACUDA: '70 Grand coupe, wh./blk. vinyl tp., air cond., pwr. steer., R&H, cons., bkt. seats, ask. $2,550. 779-4535.

OLDSMOBILE: '67 Delmont 88, 4-dr. sed., blue, recent. tuned., 49,000 mi. 669-2587.

at your SERVICE

This is a free service to Grumman personnel for non-commercial advertisements, accepted on a first-come, first-served basis. Classified advertisements are carried in PLANE NEWS only on the basis that everyone replying to such advertising will receive fair and equal consideration regardless of their race, creed, color, or national origin.

Type or print ad on form available at Employees Service and Engineering counters, and send via interplant mail to PLANE NEWS, Plant 5, Bethpage. List home phone (with area code if outside Nassau or Suffolk). Limit: one ad per person per issue. No item under $10, no firearms or ammunition.

MISC.: Wh. kit. cab., formica tp. sink cab. & sink; 36 in. wh. gas stove, $85/all. PI 6-7974.

PIANO: Baby grand, 5 ft., Aeolian, prof. main. 433-8631.

MISC.: Leslie spkr. cab., mod. 16 w/cov., casters & switch, gd. w/port. organ, $125. 378-4181.

MISC.: Outside door & frame, new, $40. 744-6492.

PAINT SPRAYER: 7/3 hp diaphragm type, Sears mod. 400 w/gun & hose, $40. 628-1546.

DIAMOND: 1 ct., round stone, appraised $1,250 in '68, ask. $850. 212 779-4535.

TAPE DECK: Tandberg 6000x, 1 1/3 yr., $390. 536-4330.

HAMMOND ORGAN: M-3 w/Leslie tone cab. mod. 146, $1,350. 585-3113.

BICYCLE: 20 in. boy's Stingray w/Sturmey Archer 3-spd. gear hub, stick shift, hd. lgt., orange w/chrome fend. & rims, rear slik tire, $30. 931-2208.

MISC.: Radius gage set Lufkin 77C, 1/32 to ½, 24 pcs., case, $12. OV 1-1878.

WELD. EQUIP.: Comp., 3 torches for lead., weld., cut., xtra hds., all tools, gauges, hoses, H.D., 2 stage reg., adapter for left & rgt. hd. treads, $135. 585-5567.

EDSEL—'58 Citation, comp. good int., runs O.K. Needs some bdy. wk. Restore or parts, drive home. $200. 212 AR 6-7819.

POOL: 12' x 36', 1968 circular, filtered, $75. 212 AR 6-7819.

HOUSE: Farmingdale, 4 bdrm. split cape, 2 bath, din. rm., attach. gar., full bsmt., mother/daug. poss., reason. CH 9-8416, after 5.

HOUSE: Bethpage Ests., 3-5 bdrm. hi-ranch, cul-de-sac, maid's rm., ldry., playrm., fam. rm. w/beam ceil., cent. air cond., s-s, w-w, 4 appli., botan. gardens, Fla. cov. patio, o.h.w., 2 zone, 2 bath, ¼ acre lndscp., low 50s. 938-6140.

DIN. RM. SET: Tbl. w/2 leaves, 4 chrs., buffet, blond, $100. 798-2786, after 6.

MISC.: Selling contents of home, leav. state. 796-4182.

MISC.: Danish import. 7 pc. bdrm. set w/king sz. bd., $600 or best offer; Danish mod. couch, $150 or best offer; Keystone 8 mm movie proj., $25; 26 in. lawn sweeper, $10; SW radio, 5 band, Navy surplus, $30. 433-8631.

MISC.: Set of 2 dbl.-hung wood wind. w/s-s & int. trim, firs, 68x52 in. open., $70. 265-8177.

MISC.: 15x3½ ft. vinyl liner, used 1 sea., $25; alum. ladder, $10; pool vac., $10; tank type diatomaceous pool filter, 4,500 gal. cap. $25. LT 9-6339.

MISC.: 3, 4 MTG hole rims w/snows; 2, 8.55x15 w/w tires, $20. 781-4871.

MISC.: 2 Ford rims & 1, 7.75x14, 4 ply w/w tire w/low mi., $20. 751-0456.

MINI-BIKE: Rupp, 3½ hp, spare eng. parts, $80. PE 5-2403.

VW ENG.: '60, 36 hp, rebit. & install., $150. 273-7509.

BLITZ KART: Mod. 6 hp McCulloch eng., hi-rise manifold, centrif. clutch, live axle, intern'l. drum bks., rac. slicks, xtras, $200. JU 4-5440.

SHOW CAR: Sleepy Saloon, nds. finishing, all parts comp., many spec. features, Halibrand quick chg. rear & mags w/low profile tires, $2,500. 796-7105, bef. 12 p.m.

RIMS: 14 in. Olds., 3/$10. OV 1-7381.

BUICK: '66 Riviera, full pwr., fact. air, maroon, new belt. poly tires, xtras, 45,000 mi. 922-4378.

CORVETTE: '67 conv., low mi., xtras. 286-9491.

VW: '66, wh., red int., R&H, low mi., $700. 586-1729, after 5.

BOAT: '65 Grady White, 20 ft., cab., 65 hp Merc., start, all canv., xtras, $1,200. 541-4124.

BOATS: 12½ ft. Alcort sailfish, fact., wood, $125; 13½ ft. Alcort sunfish, wood., incl. boat canv. cov., $225. 694-7061, bet. 9-4 p.m.

MALIBU: '68 coupe, 6 cyl., air cond., pwr. steer., 34,000 mi., $1,250. 437-0131.

CHEVROLET: '65 Super Sport, bkt. seats, radio. WE 8-5389.

COMET: '61, 2-dr., '66 rebit. 175 c.i. eng., new front end, muff., & batt., trlr. hitch, 53,000 mi., $200. 543-4541.

THUNDERBIRD: '64 conv. 589-3549.

PICKUP: '63, ¾ ton Checy, $650. 732-4767.

HONDA: '66, 305cc, fully equip., $295. FL 9-1663.

LAWNMOWER: 18 in. gas pwr'd. Sears Craftsman, self-prop., reel, w/grass catch., best offer o'$35. 585-5289.

AIR COND.: For auto., off late mod. Pontiac V-8, used 6 mo., adapt to any V-8, best offer. 265-3463.

ATTIC FAN: Hi. cap., 42 in., 2-spd., 14500/9400 C.F.M., ½ hp motor, auto. ceil. shutters, $150. 692-6692.

MOBILE HOME: '68 Liberty, 60x12, kit., 2 bdrm., bath, liv. & din. rms., early Amer. furn., cent. air cond., oil heat, $7,500. 585-1967.

SAILBOAT: 4½ ft., gd. for child, $45. 751-2283.

ROTO-SPADER: Sears 4 hp vertical eng., $135. 589-7107, after 6.

STEREO: Hitachi cassette tape record. w/2 match. spkrs., compact & port., $60 worth of tape incl., $110. FO 8-6779.

AUSTIN HEALEY: '60, 3000 Mark I, bdy. comp. restored & primed, new tp., muff., & start., 6 cyl., 4-spd., wire whls. 935-3535.

SAILBOAT: Blue Jay 2084, dacron sails, spinnaker, $500; trlr., $100. SU 5-6289.

PUPPIES: 2 Yorkshire terriers, 6 mo., AKC, perman. shots, $150/ea. HR 3-3507.

RENAULT: '65, 4-dr., new tires & clutch, $250. AR 1-1149.

BUICK: '69 Riviera, R&H, air cond., stereo tape, pwr. steer., bks., & wind., other extras, $2,800. 567-5630.

PICKUP: '54, ½ ton Chevrolet, xtra parts, $150. TU 8-9205.

For Sale

AUTO. TRANSMISSIONS: Comp. rebit., '62-'67 Chrysler Torque Flite: '64 - '70 Chevy pwr. glide, best offer. 212 347-6516, evgs.

MOTORCYCLE: '64 Triumph Boniville, 650cc, '68 eng., new clutch, chain, batt., prim. chain, elec. sys., chrome, ask. $775. LT 9-8023.

TIRES: W/w, 8.55x15, less than 5,000 mi., $25/3. TU 8-7947.

CARR.: Bilt-Rite coachette, reason. 479-0508.

CAMERA: 35mm Tessina submini., cigar. pk. sz., f 2.8 lens, 1/500 sec. shutter, flash synch., Swiss prec. motor drive, 8 shots per wind., access., eye-lvl. prism viewfind., daylgt. load. for 35 mm bulk film, 4 Tessina cassetts, $100. 212 LA 7-0273.

DESK: Knee hole, 17x43 in., 3 dwrs. ea. side, ctr. dwr., poplar, natural fin., $30. 785-1038.

MISC.: Assort. games, toys, sport. equip., ice & roller skates, elec. trains, best offer, will sell sep. SU 1-0277.

BUICK: '65 LeSabre, auto., pwr. steer., radio, blk. vinyl tp., snows on sep. whls., new batt., shocks, & exh. sys., orig. owner, $500. 241-1922, after 6.

VW: '66, new batt., muff., front end., w/w, radio, 59,000 mi., orig. owner, garaged, ask. $1,095. 421-3792.

UTIL. TRLR.: 14x4 box bdy., A frame, 16 in. tires & spare, $200. AN 1-6404.

DINETTE SET: Chrome Craft, 48 in. round wal. formica tbl., 5 blk. lea. swivel chrs., 6 mo., ask. $150. 598-2391 after 5.

CHEVROLET: '62, 4-dr. sed., auto., pwr. steer., nds. paint & eng. work, $50. JU 7-8574, after 6.

MUSTANG: '65 Fastback 2+2, new eng., tires & whls., xtra tear-drop hd., ask. $900. 543-7656.

MOTORCYCLE: '66 Yamaha, 305cc, 5-spd., maroon, $250. 796-2567, after 5.

SAILBOAT: 20 ft. Celebrity, ctr. board, fully equip., in water. MO 5-5335.

KIT. SET: Tbl. w/ext., 4 pad. chrs., $40. JU 1-3125.

DINETTE TBL.: Sol. maple Pa. house, 3x5 ft. (incl. leaf), no-mar stain resist. tp., $68. FO 8-1182.

PIANO: The Opera Piano by Peek & Son, baby grand, mahog. w/stor. bench, $200. CH 9-8964, after 5.

SURFBOARDS: 2, 9 ft. 8 in. Hopie, $65 & $60. MO 7-8981.

CAMERA EQUIP.: 35mm f1.4 Nikon rangefinder camera; f3.5 135mm, f2 85mm, f2.5 35 mm, Nikkor lenses, close-up lens, Nikon BCB flashholder, tripod, Norwood director meter, slide proj., $200. 751-4982.

GO-CART: 3.5 hp Briggs & Stratton, Merc. clutch, drum bks. AT 6-1206, after 6.

HDTP.: For MGM, lgt. blue vinyl ext., wh. vinyl int., $55. 757-1738.

GOLF CLUBS: Woods 1 & 3, irons 2, 3, 5, 6, 7, 8, 9, & pitch. wedge, putter, bag & cart, $50. Peter Wolski. Ext. 84689.

FIREBIRD: '69, air cond., 350 CID, snows on 2 xtra rims, R&H, 12,000 mi., vinyl tp. 249-8016.

OLDSMOBILE: '65 Jetstar 88, 4-dr. hdtp., auto., pwr. steer. & bks., w/w, radio, snows, $600. 751-2583.

T-BIRD: '63, all pwr., nds. muff. & tailpipe, roof rack for VW bug, $375. 212 631-3474.

DODGE: '65, 9 pass. sta. wag., pwr. steer. & bks., V-8 auto., $600. 286-3419.

PONTIAC: '68 LeMans, auto., pwr. steer., low mi., $1,400. 261-6476.

CAR RADIO: Dynatron 203, AM/manual, never used, $15. 221-6439.

SPORTS FISHERMAN: '61, 30 ft. Pacemaker, 225 hp Gray Marine, flybridge, S/S, depth find., compass, Bimini tp., slps. 5, fully equip. 751-3652, after 6.

BOAT: '64 Amer. Finn, 23 ft., 110 hp Volvo-Penta, I.O. eng. alternator, hdtp., 2 bunks fwd., hd., xtras, $1,850. LI 1-1613.

RUG: 10x12 Kodel poly, lgt. celery grn., ask. $50. 665-6639.

RANGE: 38 in. G.E. elec. w/auto. oven, $65. AN 1-8728.

CORVAIR: '63 Monza, 6 cyl., 3-spd., wh. w/blk. int., bkt. seats, R&H, ask. $200. 742-0458.

HOUSE: Centereach, 7 lrg. rms., 1½ bath, sep. din. rm., w-w, all appli., 6 ft. stock. fence, bsmt., patio, gar., $26,990. 732-9306.

PROPERTY: Wading River, 125x150 wood., pvt. bch. rgt., nr. Plt. 6, $9,500$. 368-3048.

MISC.: Bike, train. whls., $12; 15 cu. ft. freezer, chest, compart. & baskets on casters, $65. 822-2239.

BIKE: 26 in. boy's Schwinn, 5-spd., $45. PL 8-9116, after 5.

MOTORCYCLE: '70 Suzuki 350cc, 3,000 mi., lug. rack, bkrest., less than 1 yr., $598. 587-8323.

For Sale

MISC.: Philco air cond., 5,600 BTU, $85; kit. set, 30x36 tbl., 12 in. leaf, grey wood grain formica, 4 full sz. blue uphol. chrs., $20; din. rm. set, 35x64 tbl. w/12 in. leaf, 4 chrs., buffet & china closet, mahog. fin., $150; oak bdrm. set, 42 in. dress. w/mirror, sgl. bd. w/hd. & ft. bd., side raids, ngt. tbl., $95. CA 1-8477.

MISC.: 2 fbgl. awnings, 32 & 70 in. lg., $30; 4, 14 in. Chevrolet whl. cov., $15; lrg. canvas golf bag w/lea. trim, $10; B&W non-work. TV, mahog. console, $10. 271-9097.

MISC.: Air cond. w/2 compressors, 110/220v, $35; G.E. wash. mach., 2-spd., 2 cyc., $35, or $50/both. 781-2783, after 5.

MISC.: Maple din. tbl., formica tp., 48 in. dia., 20 in. leaf, $40; corner china closet, $25; 3 danish chrs., $24; wal. dress. w/mirror, $40. SU 1-3742.

MISC.: Metal wall & base kit. cab. & sink w/formica counter tp., best offer; 38 in. G.E. elec. range w/auto-oven, $75. 261-8728.

MISC.: 2 lea. tp. hexagon. tbls., $20; 150 lb. wgt. lift. set, $15. 221-9390.

MISC.: RC digital prop. sys., 4 servos, 4 channels, dual charger, servo checker, $125. IV 9-5744.

CAMERA: Polaroid, mod. 210 Land, case, $20. CH 9-3081, after 5.

BIKE: Girl's 20 in., blue, $10. SU 5-2729.

TELESCOPE: Edmund 4¼ in. reflect., equatrl. mt. on ped. base, 2 eypcs., barlow, finder, $50. 589-4844.

FIAT: '68, 4-dr. sed., mod. 124, $600. 775-0508.

MGA: '59, 1,600, new tp., redone int., $575. WA 1-5178.

VW: '66 Bug, radio, new w-w, batt., muff., front end, orig. owner, gar., 59,000 mi., $1,095. 421-3792.

BARRACUDA: '70, wh. w/blk. vinyl tp., air cond., bkt. seats, cons., lgt. pack, low mi., 50,000 mi./5 yr. warr., ask. $2,600. 779-4535.

HONDA: '66, 305cc, new batt. & clutch, elec. start., helmet & goggles, $350. FL 9-1663.

TIRES: 5 new Bridgestones, 5.60x13, nylon, 4 ply, tubeless, w-w, $75. 864-1022.

BUMPER GUARDS: Front & rear sets for '67-'70 Cougar, $25. 487-6079.

RUNABOUT: 17 ft., 40 hp Evinrude Navy tp., new trlr., rdy. for water, $900. 884-8165.

BOAT: 16 ft. Glaspar, tp. & side curt., 40 hp Evinrude, elec. start., water skis, cush., run. lgts., trlr., xtras, $995. 724-5129.

BOAT: 11 ft. fbgl. sailboat, decron sail., trlr., $450; '68 Ford Cortina, $750. 724-6441.

BOAT: 15 ft. Winner fbgl. runabout, ctr. deck, remote cont./steer., 35 hp Johnson outbd., 2, 6 gal. remov. tanks, fast ski boat, Tee-Nee tilt trlr., $695. 588-6793.

CRUISER: '62 Norwalk, 25 ft., fully equip., new slant 6 eng., will rent. 922-6180.

POOL: '70, 12x42 w/filt., ladder, vac., cov., chem., used 2 mo., $120. HA 3-3611.

POOL COV.: Nylon mesh for 15 ft. round pool, $15. CH 9-4007.

HI-FI COMP.: FM tuner, Heathkit, $15; Lafayette stereo amp, 10 w/channel, $15; Heathkit spkrs., $15. 928-2413.

BABY CARR.: Bilt-Rite, Pk. Ave. line, burgundy, matt. & canv. cov., $65. 724-7362.

DIAMOND: No imperf. discern., appraisal value, $1,250, ask. $850, pres. in man's pinky ring. 212 779-4535.

BUICK: '66 Skylark, auto., radio w/rear spkr., pwr. steer., rear wind. defrost., xtra tires on rims, $800. 538-1740.

STA. WAG.: '65 Vista Cruiser 9 pass., auto., pwr. steer. & bks., ask. $850. MO 9-3621.

BUICK: '68, air cond., full pwr. JU 6-7545.

MERCURY: '68 Montego MX, 2-dr. hdtp., vinyl roof, 8 cyl., auto., pwr. steer. & bks., ask. $1,450. 567-4113, evgs.

MUSTANG: '67, red/blk. vinyl tp. & int., 289 V-8, auto., new w-w, bks., batt. & fuel pump, ask. $1,400. 589-7727.

MOTORCYCLE: '69 Honda, 450cc DOH, low mi., $575; '70 Honda, 750cc, 4 cyl., disc bk., Vetter fairing, $1,275. 212 779-6362.

MISC.: '55 Chevy, $30; cyl. hds., 389 eng., $20/set; bkt. seats, $15; Elderbruck hi-rise manifold for Plymouth 440, $30; dual coil, dual pt. distributors, $25/set. TU 8-3114.

HOUSE: Islip, 4 bdrm. cust. brick & cedar, 2½ car gar., 2 tiled bath, full fin. bsmt., bar, 3 zone o.h.w., plaster, w-w, s-s, cov. slate patio, 100x100 treed, lndscpd., copper gutters, oak flrs., xtras, $35,000. JU 1-9332.

DODGE: '66 Dart, $250. LI 1-6928.

For Sale

HOUSE: Huntington, N. of 25A, 3-4 bdrm. ranch, pvt. lot, liv. rm. w/firepl., fin. bsmt., brick & cedar ext., formal din. rm., eat-in-kit., ctr. hall, sewers, wlk. to vill., $47,000 or best offer. AR 1-2421.

HOUSE: Wantagh, pk. area, 3 bdrm. fully dormered cape, new kit., full bsmt., framed out for 2 rms. & bath, $29,000. SU 5-8149.

PROPERTY: ½ acre wood. plot, Pocono area, lake & ski priv., est. vacation community. MO 7-2960.

MISC.: Buffet, $40; china closet, $40; 3 w-w tires, 8:50x14, $24; Selmer clarinet, $175; beginner's trumpet, $15. WE 5-0885, after 6.

HOUSE: Plainview, Wash. Ave. vic., 3 bdrm. hill tp. ranch, ctr. hall, 2 bath, liv. rm. w/firepl., formal din. rm., eat-in-kit., den, mud rm-ldry., 2½ car gar., patio, all appli., carpet., xtras, 7 yr., ask. $57,000. 692-2738.

HOUSE: Farmingdale, mother-daughter cape, semi-fin. bmst., 2 apts., gar., air cond., all appli., w-w, $37,990. 293-8454.

COUCH: 92 in. lgt. grn., $85. 543-3732.

REFRIG.: 17 cu. ft., 2-dr., turquoise, ask. $25. 212 762-2163.

BOAT: 14 ft. fbgl. Sunfish, 95 sq. ft. sail., trlr., ask. $495. WA 1-7191.

BICYCLES: 24 in. gril's, 1 orange, 1 yellow, $10/ea. or best offer. JU 8-3951.

PUPPIES: 3 Germ. shep., Belgian strain, 2 male, 1 fem., sire is appr'd. guide dog, k/19 champ. & 11 reg. of merit (ROM) in lineage. dame is descend. of Rin-Tin-Tin, AKC, male $200, fem. $150. 293-6845.

MUSTANG: '69 Mach I, 428 Cobra Jet, 23,000 mi. PI 2-4267, evgs.

DODGE: '66 panel, new V-6 eng., new transmit., batt., & clutch, $1,000. 472-0432.

MINI-BIKE: Bonanza, 4 hp, jack-shaft, 12 in. whls., front susp., $125. BA 3-1247, after 5.

WAGON: '70 Ford, roof rack, pwr. steer., auto., $2,600. 732-3103.

CHRYSLER: '65 conv., 300, pwr. steer. & bks., $800. IV 1-8437.

MOTORCYCLE: '69 Sears 106cc, red, $350. WE 5-0189, after 5.

MISC.: 2 w/w snows, 8.55x14, General, mtd. on Pontiac whls., $40/both. FL 4-4304.

CHEVROLET: '66, 4-dr. sed., new plugs, pts., batt. (4 yr. warr.), carb. & fuel pump, tuned up, R&H, auto., pwr. steer. & bks., $195. 293-6845.

GAR. DR.: Sgl. car., wood fold roll up, comp. w/guide rails & fitt., lock. handle, best offer. OV 1-7248.

CEMETERY PLOT: For 2, Pinelawn, nr. fountain, $450. CH 9-4009.

CADILLAC: '61 conv., R&H, no rust, best o'$200. 724-0365.

MGBGT: '70, blue/blk. int., AM radio, std. 4-spd., cons., rear defrost., 16,500 mi., $2,750 or best offer. G. McMahon, Ext. 7146.

HOUSE: Selden, 3 bdrm. ranch, full bsmt., 80x132, nr. shop., ask. $20,990. 621-3734.

BOAT: 24 ft. Amer. Finn, in/outbd. Volvo, all mahog. & tach, cuddy cab., hd., full vinyl canv., xtras, $3,500. 666-8634.

PLAY. PIANO: 40 music rolls, $300. 543-0646.

MISC.: Magnavox, 6 ft. lowboy, 23 in. B&W TV, stereo phono. & radio, AM/FM, $100. 938-6140.

MISC.: Danish mod. din. rm., breakfront & server, tbl., 6 chrs., $300; yellow formica & chrome dinette, $40; 3 pc. Naugahyde sofa, $30; 2 lea. chrs. & ottoman, $15; 2 lamps, $10; 21 in. color G.E. TV, nds. repair, $50; early Dumont TV cons. w/FM, $25. 822-6892.

MISC.: 22 in. girl's bike, $10; 23 in. cons. color TV, mahog. w/new pic. tube, $40; 10 gal. aquar. tank w/cov., reflect., pump, filt., $10; hvy. Col. sofa, match. chr., 2 tbls., 2 lamps, rug, $150. 289-5623.

FANS: 2, 21 in. G.E. wind./fl., 3-spd. elec. reverse, $20/ea. 212 463-6228.

AIR COND.: Sears Coldspot, 2 yr., 6,200 BTU, $85. WE 5-3179.

GTO: '66, 389/340 auto., wh. w/blk. vinyl tp. & lea. int., 4 new tires, 2 snows, $1,300. 489-2594.

PICKUP: '69 Chevy, ¾ ton, 307, V-8, 4-spd. fl. shift, pwr. bks., rear cov., 16 in. whls., set up for camp. 226-4864, after 5.

CB RADIO: 2-way, real. Navaho TRC 23 B sol. state, 23 channels all crystal, oper. on 115 v AC or 12 DC, '71 mod., $75. IV 9-6073.

BOAT: '65 Thunderbird, 18 ft., 90 hp, S/S, trlr., hd., depthometer, compass, tach., speedometer, windshld. wiper, spot lgt., full float., xtras. in water. HR 3-3232.

For Sale

CHORD ORGAN: Hammond M-3, a sk. $375. 212 271-6412.

LAWNMOWER: 21 in. Toro self prop. reel type, $75. CH 9-2359.

BELGIAN BLOCKS: 46, $16.50/all; 49 fire brick. CA 1-3095.

CADILLAC: '65 Sed. de Ville, fully pwr'd., air cond., w/w, cruisematic, AM/FM, new tires, shocks, & bks., low mi., $1,685. 868-6516, after 6.

DODGE: '63 Dart G.T. hdtp., 6 cyl., std., blk. w/red int., 2 xtra whls., $225. 549-8898.

VW: '68 Bug, AM/FM, new shocks, tires & muff., tuned, $1,350. PE 5-7879.

WAG.: '63 Buick Spec., V-6 auto., new bks., ball joints, tires, & batt., $375. 694-5807.

PICKUP CAMP.: '67 Dodge ¾ ton, '68 Franklin F11K, 4 ft. gas/elec. refrig., 4 brnr. gas stove, hd. w/shower, blt. in compressor for the hot/cold water sys., Coleman heat., $4,000. 757-1504, after 6.

PROJ. SCRN.: 40x40 Lenticular radiant colormast, never used, $20. 212 663-7611.

CAMP TRLR.: Wagonmaster, slps. 6, lrg. stor. cab., tbl. for 6, curt., 120vac/12vdc, $1,200. 766-5617.

MINI-BIKE: '70 Bonanza, 10 hp Hodaka eng., Westhampton scrambles winner, $235. PY 8-4258.

VW PARTS: 2 sets seat belts; hd. lgt. assy., turn lgt. assy.; new fuel pumps for mod. 1200 & 1300. 931-8175.

ENG.: '70 Ford, 351 c.i., 3,000 mi., will fit '63 & up. MO 9-6977.

HOUSE: Next to Bethpage State Pk., lrg. brick split, 3 bdrm., 2½ bath, din. rm., den w/ frepl., central air, alarm, 2 car gar. w/elec. eye dr., all util., 150 amp serv., wlk. to RR, shps, church, lrg. fenc. lndscpd., $43,990. 822-3214.

HOUSE: Queens Village, 7 rm., 4 bdrm., s-s, walk to sch., churches & transport. HO 5-6349.

HOUSE: Hicksville, 2 bdrm. ranch, 60x100, 1½ bath, attach. gar., fin. bsmt., lrg. porch, tool house, fenc., nr. transport. & shop. ctr. WE 5-4291.

HOUSE: Smithtown, 3 bdrm. hi-ranch, ¼ acre, din. rm., eat-in-kit., 1½ bath, carpet., 20x22 playrm., blt.-in bar, porch, patio & lgts., util. house, gar., air cond. master bdrm., appli., sink, stove, & treezer in bsmt., xtras, 5¾% mtge., $35,000. AN 5-4779.

HOUSE: Sayville, 3 bdrm. hi-ranch, w-w, Fla. rm., 24 sq. ft. detach. gar., patio, ngt. club type recreat. rm., alum. sid., 75x13 driveway, xtras, $37,500. 567-1970.

HOUSE: N. Smithtown, 3 bdrm. Col., 1½ bath, formal din. rm., den, eat-in-kit., fin. bsmt., fenc., trees, shrubs, appli., $31,500. 724-1469.

HOUSE: Malverne, Tudor style., 4 lrg. bdrm., 2 bath, grepl., gar., porch, bk. yd., din. rm., bsmt., wlk. to vill., RR, & bus, will rent. 884-1236.

FURN.: Col. sofa, 85 in., print, $75; 9x12 shag rug w/pad, 1 yr., $75; canopy crib w/matt., wh. Col., $50. 751-2620, evgs.

MISC.: 7 pc. bdrm. set, best offer; 9 pc. liv. rm. set, best offer; 8 pc. dinette set, best offer, 15 cu. ft. freezer, 3 yr., best offer; new Kenmore 16 lb. cap. wash. mach., $150. 212 479-0809, evgs.

KIT. SET: Gray, 4 pad. chrs., tbl. w/leaf, $40. JU 1-3125.

MISC.: Oil burner, $20; 275 gal. oil tank, $25; port. kerosene heat.; cab. or gar. heat., $25; Lancaster water pump, $35; metal kit. set, $15; dress., $15; 2 oak arm chrs., $10/ea. sma. kneehole desk; "steelcase" 30x60 desk, $45; 4 ft. 2 tube fluorescent fix.; formica tp. w/sink. CA 1-3095.

OUTBD.: '60, 18 ft. Shoup Princess, '66, 50 hp Mercury outbd., fully equip., in water, rdy. to go. PY 8-6382.

SKIFF: 34 ft. Pedersen, twin 225 hp Palmers, fwc, 2-1 red., slps. 5, xtras, $8,500. 842-0795.

SURFBD.: 9 ft. 6 in., wet suit, $75. AM 4-5689.

SURFBD.: Hansen 50/50, 9 ft. 8 in., w/twin rails, remov. skeg & hand paint. design, roof racks & wet suit incl., $100. 567-2416.

CHEVELLE: '69 Malibu, 2-dr. hdtp., red w/blk. vinyl tp., 307, V-8, auto., pwr. steer., w/w, AM radio. 941-4885.

OLDSMOBILE: '70, 98 lux. coupe, air cond., fully equip., stereo tape deck, xtras, $3,800. 621-0920, after 5.

STA. WAG.: '66 Dodge Polara, air cond., pwr. steer. & bks., reg. 8, ask. $950. 757-5755.

STA. WAG.: '61 Falcon, 2-dr., std., new '67 eng. w/14,000 mi., new exh. sys., xtras, $200. 732-5817.

MISCS.: Go-Kart, new slicks, set-up for Briggs or Tecumseh eng., $75; Dell'orto 22 mm carb., rac. w/adapter for Briggs or Tecumseh eng., $20; 18 in. rotary lawnmower, 2½ Briggs, $20. OV 1-3478.

For Sale

FORD: '64 blue 2-dr. hdtp., V-8 auto., ask. $350. 334-8729.

BOAT: '55 Ulrichsen cab. cruiser, 26 ft., slps. 4, comp. refin., rdy. for water, ask. $2,200. BA 3-3469, evgs.

HOUSE: N. Syosset, 7 rm. ranch, 3 bdrm., 2 bath, eat-in-kit., pan. den w/firepl., full bsmt., air cond., 5¾% mtge., cul-de-sac, $42,900. WA 1-3748

CEMETERY PLOTS: 3 in Pinelawn Memorial Pk. 289-5623.

STA. WAG.: '63 Rambler Ambassador, 4-dr., V-8, pwr. steer. & bks., radio, $350. BA 3-3500.

FORD: '66 cust., 6 cyl., std., new tires, $475. J. Caselles, Ext. 57-456.

CORVETTE: '67 conv., 327 c.i., 350 hp, maroon w/blk. tp., 4-spd., AM/FM, wide ovals, burg. alarm, $2,000. 826-8970.

MERCURY: '67 Park Lane, 4-dr., full pwr., new tires, bks., & shocks, comp. tuned, ask. $1,350. 234-0958.

FIAT: '69, 124 Spyder, French blue/blk. int., conv. tp., Blaupunkt AM/FM, 5-spd., 21,000 mi. 212 454-4073.

MERCURY: '65, 4-dr. hdtp., 40,000 + mi., $800. CH 9-2359.

CHEVROLET: '68 Impala, 4-dr. sed., 307, V-8, pwr. steer., R&H, low mi., ask. $1,450. 585-0814.

STA. WAG.: '64 Mercury Colony Pk., pwr. steer. & bks., 65,000 mi., orig. owner, auto., $350. HA 7-6948.

CHEVROLET: '63 Impala conv., nds. muff. & pipe, best offer. 223-8275.

TR-4: '65, Michelin X tires & snows, $850. 731-8008, after 5.

VALIANT: '65, 4-dr. sed., xtra set of whls., $250. 543-4510.

CHEVROLET: '62 sta. wag., $100. PE 1-3123, after 5.

JEEPSTER: '48 red, new tp., no rust, xtra parts, o'drive, "F" hd., 4 cyl., $650. HA 3-4011.

TRAVEL TRLR.: New '71 Borg-Warner Dreamer, 19 ft. tandem axle, slps. 6, fullbath, air cond., forced air heat., other features, $3,495. JU 4-6633.

FLA. CAMPER: '65 Apache Buffalo w/canopy, slps. 5, xtras, $500. 489-5634.

TENT CAMP.: Slps. 4, spare tire, xtras, $400. PE 1-7008.

HOUSE: Holbrook, 3 yr. all brick ranch, 7 rm., eat-in-kit., liv. & din. rm. beam. ceil., w-w, patio, treed plot, comp. lndscpd., $29,500. 585-1849.

HOUSE: Westbury, 1/3 wood. acre, uper fl., 5 bdrm., playrm., 2 firepl., 2 bath, 20x40 ball rm. w/firepl.; down, ball rm., din. rm., den lib., fam. rm., kit, 3 firepl., butlers pantry; attach. gar. w/2 rm./bath apt.; by appoint. 333-1225.

HOUSE: S. Huntington, 4 bdrm., 2 full bath, s-s, o.h.w., fin. bsmt., patio, Dist. 13, $29,500. 271-5130.

HOUSE: Bethpage, 9 rm. mother/daugn. ranch, ½ acre, 2 car gar., cust., nr. Grumman, wlk. to shops, sch., church, mid 50s, by appoint. OV 1-6188.

HOUSE: Port St. Lucie, Fla., 3 bdrm., Fla. rm., fully air cond., nr. churches, marina, cultural ctr. & country club, free bus to city shops. 212 343-6875.

HOUSE: Deer Pk., all brick 2 fam., 2 bdrm., lounge, kit., bath, upper fl., 2 bdrm., bar/playrm., bath, kit., sep. ent., lrg. gar. & breezeway, lrg. yd., $35,500. 667-9788.

HOUSE: Bellmore, 3 bdrm. ranch, fin. bsmt. w/bar, wlk.. RR, shops, adjoin. lake, $33,500. 781-4871.

HOUSE: N. Massapequa mother/daugh., 3 bdrm. all brick ranch, firepl., 100x100 plot, fully lndscpd., 2 add. bdrm. apt. down, sep. ent., bath & kit., $200/mo. rental, take over 6% mtge, $36,000. 799-8788.

HOUSE: Farmingdale, 3 bdrm. lrg. cust. ranch, 1½ bath, firepl., appli., full bsmt., s-s, $38,500. 694-7437.

HOUSE: Smithtown-Nesc., Brookfield Estates, 4 bdrm. ctr. hall Col., 2½ bath, formal din. rm., den w/brick firepl., eat-in-kit., 18x15 sunken liv. rm., w-w, s-s, 2 zone o.h.w., air cond. ducts, all appli., lndscpd., fenc., 1/3 acre, 2 car gar., part. fin. bsmt., mid. 40s. 585-0441, after 6.

BOAT: '64 Trojan Express cruiser, 24 ft., 195 hp Gray Marine eng., 340 hr., S/S, depth find., compass, in water, rdy. to go, $2,900. 929-6261.

SAILBOAT: '64 Pearson Ariel, 26 ft., fully equip., in water, rdy. to go. HA 7-8947.

BOAT: Sailfish, refin. this season, rdy. for use. 666-8967, after 5.

BOAT: 14 ft. MFG, fbgl., 40 hp Johnson outbd., elec. start. w/less than 25 hrs., all necessary equip., $1,000 or best offer. AM 4-0368, after 6.

About the Investment Plan—update report on GEBT Fund

There have been some inquiries about a General Employees Benefit Trust Supplemental Equity Fund listed as an investment in the Grumman Employee Investment Plan prospectus dated May 25, 1971, page 26. To clarify the status of the GEBT Fund, the Investment Plan Office has issued this statement:

The Employee Investment Plan Prospectus of May 25, 1971, that was recently distributed to Investment Plan participants contains a list of the investments held by the Plan at December 31, 1970, including the cost and market value of each investment at that date. Included among the investments in the Equity Fund were 29,048 units in the General Employees Benefit Trust Supplemental Equity Fund, which is identified in the Prospectus as "A Fund maintained by Bankers Trust Company".

Questions have been raised as to just what this GEBT Fund is, whether Bankers Trust is investing a large proportion of the Equity Fund in a fund which they manage for their gain, and why this particular investment shows a substantial loss at December 31, 1970.

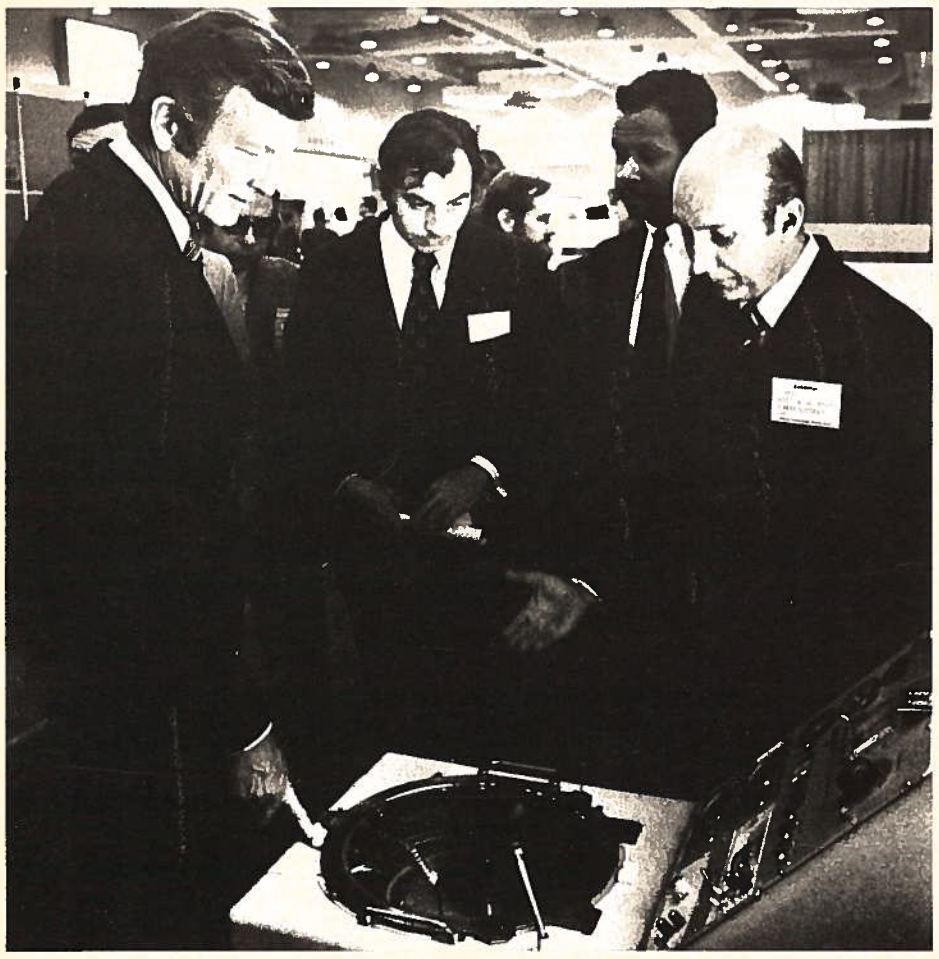
The GEBT Fund is a private fund maintained by Bankers Trust Company solely for the benefit of its clients. They charge no management fee for maintaining it. The Fund is invested primarily in the stocks of lesser known companies which, in the opinion of Bankers Trust, have growth potential but which would be unsuitable for a large commitment of the funds of any single client. In essence, it is a fund within a fund with a number of employee benefit trusts, including the Grumman Pension Plan and Investment Plan, participating. At December 31, 1970, the book value of the GEBT Fund was approximately $642,000,000 and the market value was approximately $648,000,000. At March 31, 1971, the book value remained at approximately $642,000,000 while the market value had increased to nearly $800,000,000.

At the end of 1970, the book value of the 29,048 units held by the Investment Plan was $3,973,00 and the market value was $3,364,000. By March 31, 1971, the market value of these units was $4,107,000 and by June 30, 1971, it was $4,337,000. Naturally, it is hoped that this trend will continue.

Quarterly reports of the GEBT Fund, showing individual investments, are available for examination in the Investment Plan Office, Plant 28.

Lucky 13th? . . .

An industrial complex hardly seems the place to raise a family, but a wild rabbit knows a good thing when she sees it, and on July 13 she gave birth, close to the Plant 34 guard booth. Ed Stewart of Plant Protection and Joe Dudek of Maintenance have her nest roped off, and there isn't a better-looked-after rabbit family anywhere around.



Space spinoff. **Mayor John Lindsay (L) and aide stop by Grumman exhibit at Urban Technology Conference held in New York City recently to chat with Floyd Thomas (2nd R) and Don Hass (R) about Heart Lung Transporter equipment. Grumman and other aerospace companies participated in the conference to examine possibilities of transferring aerospace technology to solving some of the urban problems.**

Navy interested. **Grumman's hydrofoil research efforts and resources were presented by Program Manager Bob Johnston (foreground) at recent briefing on missile craft to guests: Rear Adm. W. H. (Tag) Livingston (L), CNO Development Air Surface & Electronic Warfare Div.; Capt. L. W. Kelley, CNO Special Operations Branch; (Vice President Ross Mickey); Lt. Cdr. M. G. Hill (R), Ship/Craft Support; Capt. J. W. King Jr., Surface Warfare Branch.**

Flagstaff rests after gun trials

While PGH Flagstaff, Grumman's hydrofoil gunboat, rests on its laurels after a month-long demonstration off the West Coast, the Navy continues its active interest in future hydrofoil boats equipped with surface-to-surface missiles and anti-aircraft batteries.

Visitors from high echelons of the Navy, including the Office of the Chief of Naval Operations, came to Bethpage recently to receive briefings from members of Business Development and Ocean Systems. Their visit reflects the Navy's interest in smaller defensive weapons systems, and hydrofoil gunboats in particular.

In June a group headed by Dr. David Jewell, who is technical manager of the Hydrofoil Development Program, Naval Ships Research & Development Center, saw a recent film on the PGH gun demonstration and visited Grumman's unique Whirling Tank in Plant 12. They were brought up to date on hull, foils, and propulsion design, weapons and weapon system integration, integrated logistics support, and future projects.

On July 7 Rear Adm. W. H. "Tag" Livingston, CNO Development Air Surface & Electronic Warfare Division, paid a visit, accompanied by Capt. J. W. King Jr., CNO Surface Warfare; Capt. L. W. Kelley, CNO Special Operations Branch; and Lt. Cdr. M. G. Hill, CNO Ship/Craft Support. They reviewed Grumman's technical approach to the PHM, missile-carrying hydrofoil gunboat, for which a Request for Proposal is expected to be issued by the Navy in October. Admiral Livingston is one who will be evaluating the proposals.

Prep No. 4 Tomcat for Mugu

Tomcat 4 was moved from Bethpage to Calverton Sunday, July 18, the day after the Grumman annual picnic.

Number 4 is the first of the electronics system test planes. After prepping at Calverton it will go to the Company's facility at the Navy's Point Mugu Missile Range. At Mugu, its weapons system will be installed and checked out.

It's expected that Tomcat 4 will be delivered to the Hughes Aircraft Company, where it will be flight tested with the Phoenix missile, probably in November.

Also at Calverton now are Tomcats 2 and 1-X. F-14 3 is at Plant 5 for laboratory calibration of its structural instrumentation. Number 3 is the "structural" aircraft, the one that must demonstrate that it can sustain air loads and G loads put on it in its flight regime. It is scheduled to fly this autumn and go through a battery of test flights lasting for about a year.

As matters now stand, Tomcats 2 and 1-X are to be in the air by early August.

Number 2, of course, has flown for almost 37 hours and has experienced five in-flight refuelings. Its planned lay-up has been primarily for the installation of its stall parachute (to help "level" the plane following a deliberate stall) and its EPU (Emergency Power Unit), which provides a separate source of electrical and hydraulic power.

Designed as a low-speed stall-test aircraft, Tomcat 2 flies as a fixed-wing aircraft.

The 1-X, on the other hand, is the high-speed test plane, the bird that expands the flight (speed) envelope. Therefore, its wings will have sweep-back capability. In addition to its speed mission, 1-X must prove that—despite attempts to make the plane shake (flutter) during flight—will be stable and safe to fly.

Vets counsellor

Vets with questions concerning VA loans, insurance, or the like should contact Bob Regan, a VA counsellor who visits Bethpage every other Thursday. Bob's office is in Plant 2, Ext. 2814. His next visit is scheduled for July 29.